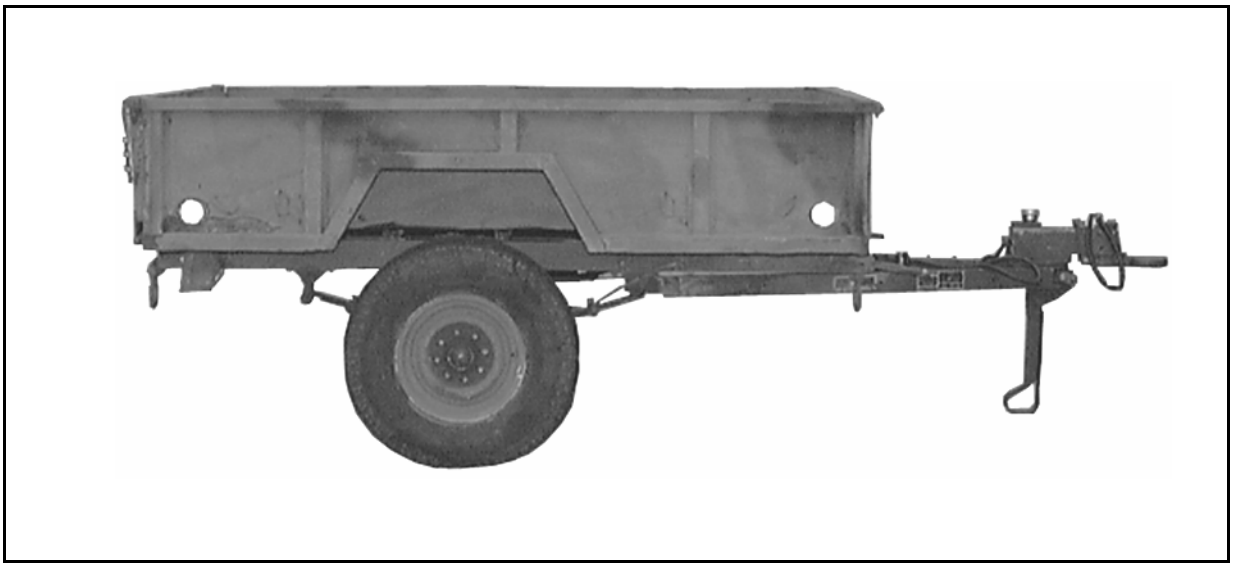
FM 4-20.113 (FM 10-513)
AIR FORCE TO 13C7-3-51

AIRDROP OF SUPPLIES AND EQUIPMENT:

RIGGING 3/4-Ton Cargo Trailers



JULY 2003

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HEADQUARTERS
DEPARTMENT OF THE ARMY
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Field Manual
NO 4-20.113
Technical Order
NO 13C7-3-51

HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 8 July 2003

Airdrop of Supplies and Equipment Rigging 3/4-Ton Cargo trailers

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Preface

This manual tells and shows how to prepare and rig the M101, M101A1 and M101A2 trailers for low velocity airdrop from a C-130 , C-141, C-17 and C-5 aircraft.

User Information

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Introduction

This manual shows the equipment and gives the steps to rig the M101, M101A1 and M101A2 3/4-ton, two-wheeled trailers. The trailers are rigged for low-velocity airdrop from the C-130, C141, C-17 and C-5 aircraft on a type V platform.

CAUTION

Only ammunition listed in FM 10-500-53/MCRP 4-3.81/TO 13C7-18-41 may be airdropped.

RIGGING THE M101, M101A1 OR M101A2, 3/4-TON CARGO TRAILER WITH ACCOMPANYING LOADS

DESCRIPTION OF LOAD

1. The M101, M101A1 or M101A2, 3/4-ton cargo trailer (Figure 1) with accompanying loads is rigged on a 12-foot typeV platform for low velocity airdrop. The load shown is rigged with accompanying loads consisting of 22 boxes of 105-millimeter ammunition and weighing 2,440 pounds. The 3/4-ton cargo trailer is rigged with one or two G-11B cargo parachutes depending on the rigged weight. The 3/4-ton cargo trailer may also be rigged with an accompanying load weighing a maximum of 1,500 pounds is stowed in the trailer. Additional accompanying loads may be stowed on the platform as long as the maximum rigged weight does not exceed 8,000 pounds. The unrigged trailer weighs 1,340 pounds. It is 147 inches long and 71 inches wide. The height of the trailer is 82 inches, reducible to 51 inches.

PREPARING PLATFORM

2. Prepare a 12-foot type V platform according to TM 10-1670-268-20&P/TO 13C7-52-22 and as shown in Figure 2.

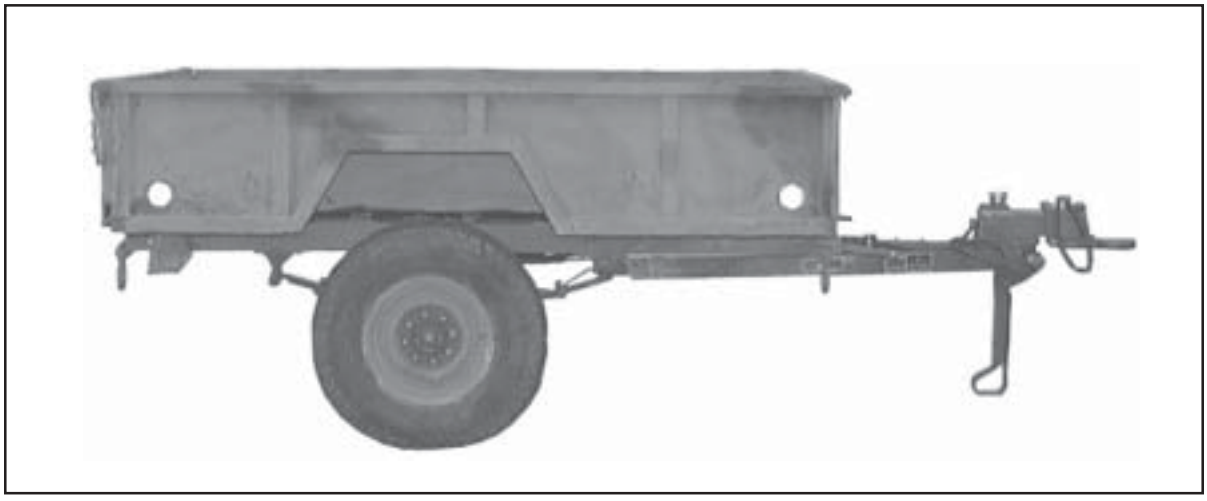
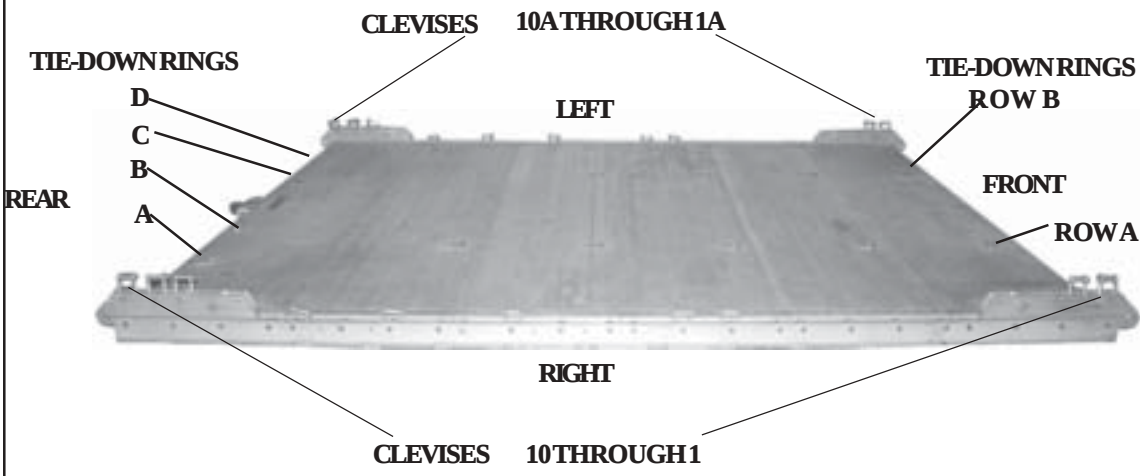


Figure 1. M101A2, 3/4- Ton Cargo Trailer



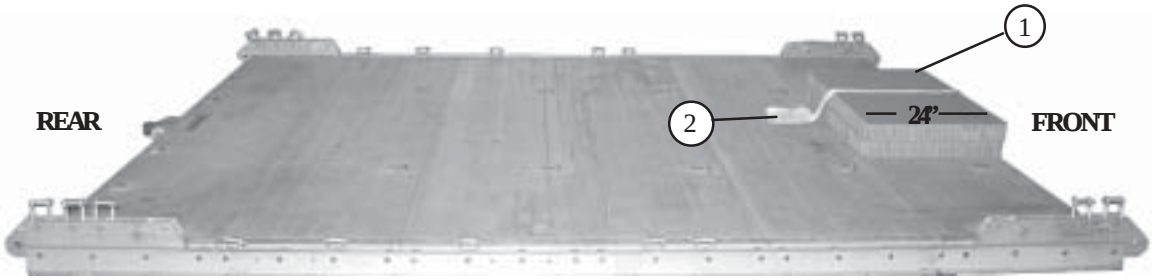
Step:

1. Install a tandem link on the front of each platform side rail using holes 1, 2 and 3.
2. Install a clevis on bushings 1 and 2 on each front tandem link.
3. Install a tandem link on the rear of each platform side rail using holes 22, 23 and 24.
4. Install a clevis on bushings 2, 3 and 4 on each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on the bushings bolted on holes 10, 11, 15, 18, and 20.
6. Starting at the front of the platform, number the clevises 1 through 10 on the right side and 1A through 10A on the left side.
7. Starting at the front of the platform, label the two tie-down rings on the first five panels A and B from right to left. Label the four tie-down rings on the last panel A, B, C, and D from right to left. Starting with the first panel, number the tie-down rings 1 through 6.

Figure 2. Platform Prepared

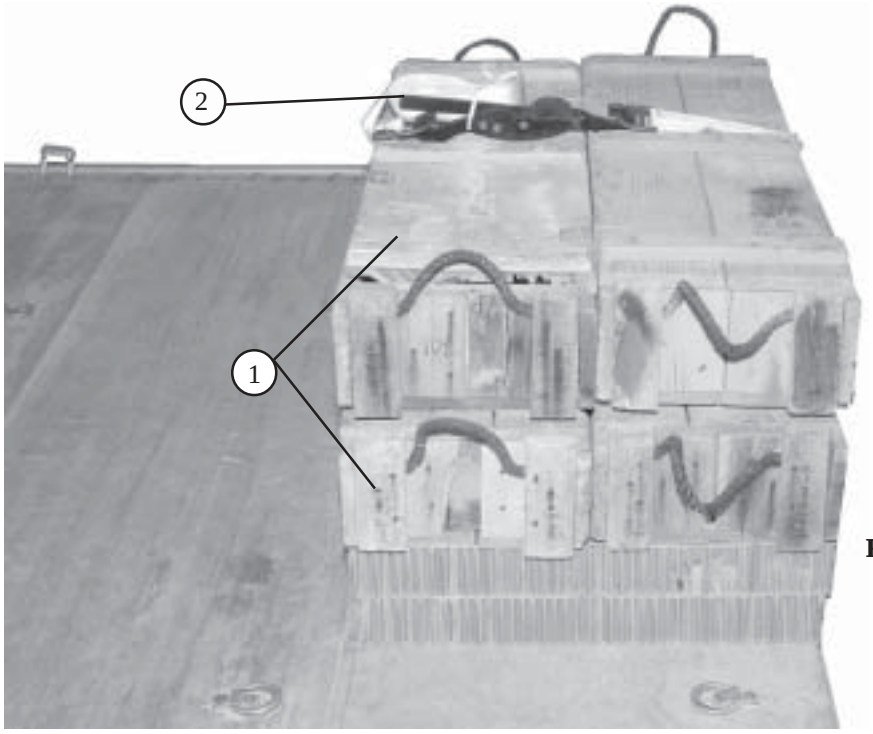
POSITIONING AND LASHING ACCOMPANYING LOADS ON PLATFORM

3. Position and lash the accompanying loads on the platform as shown in Figures 3 through 8.



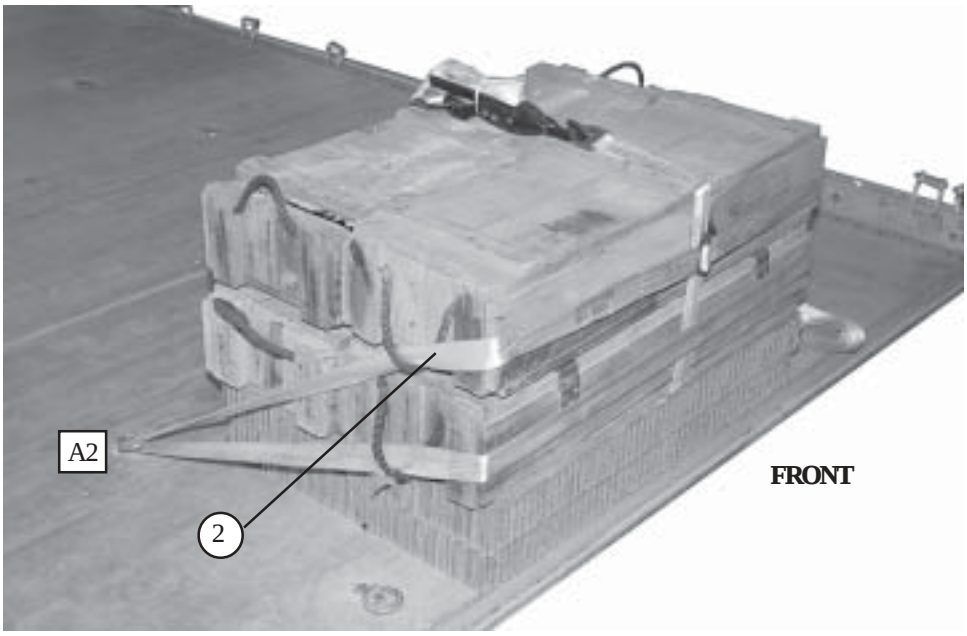
1. Center two 36- by 24-inch pieces of honeycomb on the front edge of the platform.
2. Center a 15-foot lashing from front to rear across the top piece of honeycomb.

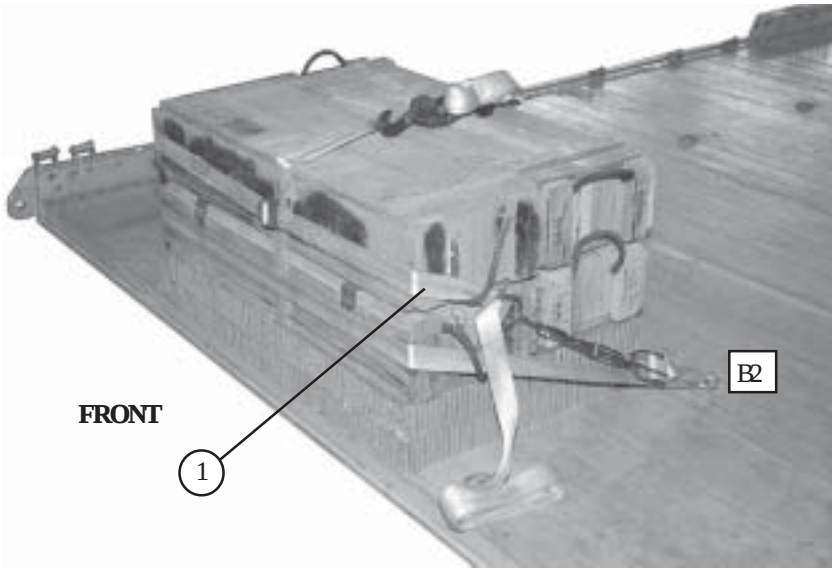
Figure 3. Honeycomb and Lashings Positioned on the Front of the Platform



1. Place four ammunition boxes in two stacks of two each on top of the honeycomb.
2. Bind the boxes together using the pre-positioned lashing, a D-ring, and a load binder.

Figure 4. Ammunition Boxes Positioned on the Front of the Platform

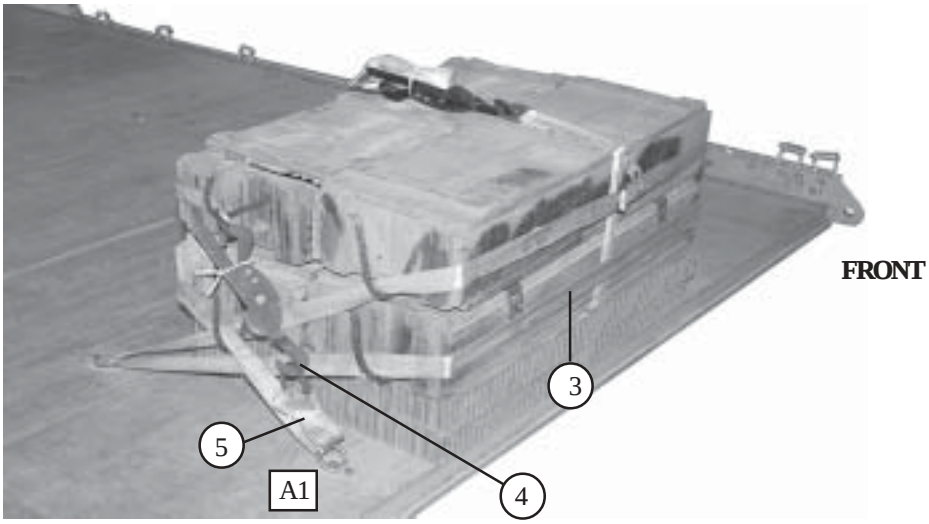


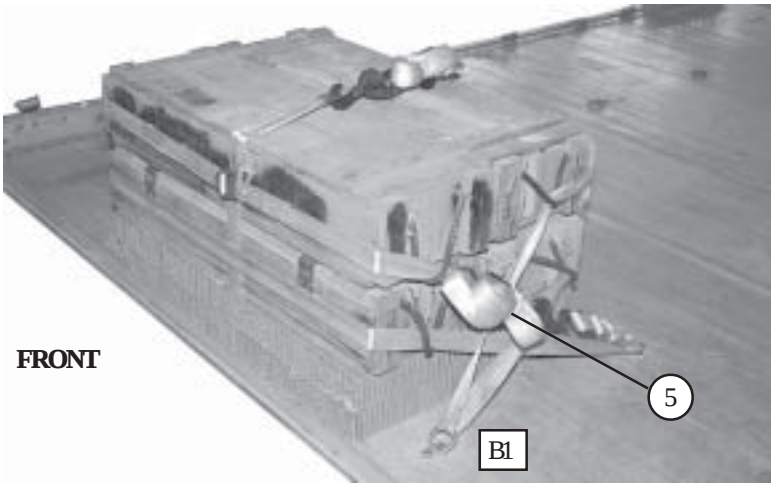


(1) Form a 30-foot lashing according to FM 4-20.102/TO 13C7-1-5. Starting on the front, pass one end through the carrying handle of the top front box on the left side. Attach a D-ring and a load binder to the end. Do not secure the lashing at this time.

(2) Pass the free end of the lashing through the carrying handle of the top front box on the right side, down through tie-down ring A2, and through the carrying handle of the bottom front box on the right side. Continue to pass the lashing around the front of the bottom box, through the carrying handle of the bottom front box on the left side, through tie-down ring B2. Attach D-ring to thelashing and load binder. Do not secure the lashing at this time.

Figure 5. Ammunition Boxes Lashed and Secured on the Front of the Platform



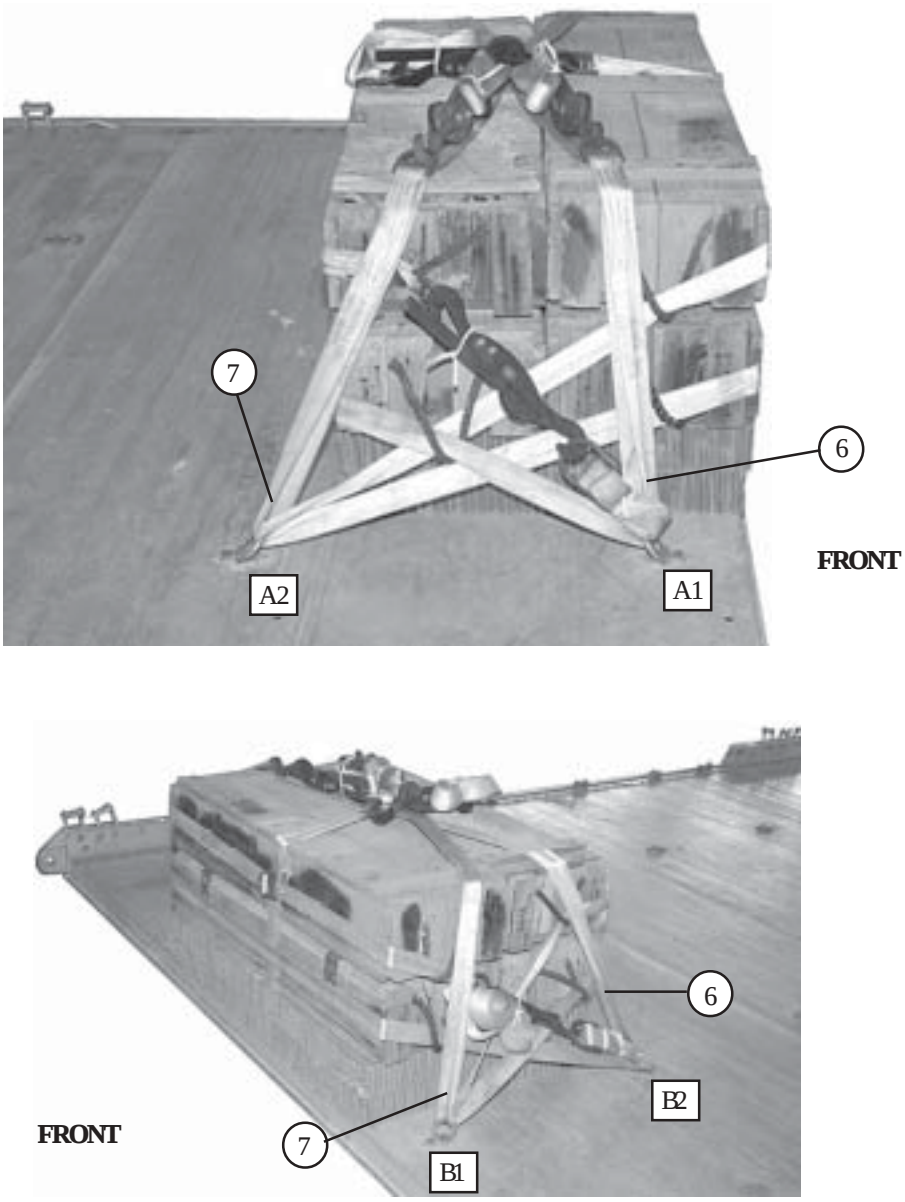


(3) Starting on the right side, pass a 15-foot lashing through the carrying handle of the top rear box, around the rear of the top box, through the carrying handle of the top rear box on the left side, and through tie-down ring B1. Continue to pass the lashing through the carrying handle of the bottom rear box on the left side, around the bottom of the rear box, through the carrying handle of the bottom rear box on the right side, and through tie-down ring A1.

(4) Attach a D-ring and a load binder to the end. Do not secure the lashing at this time.

(5) Secure each front and rear load binder simultaneously.

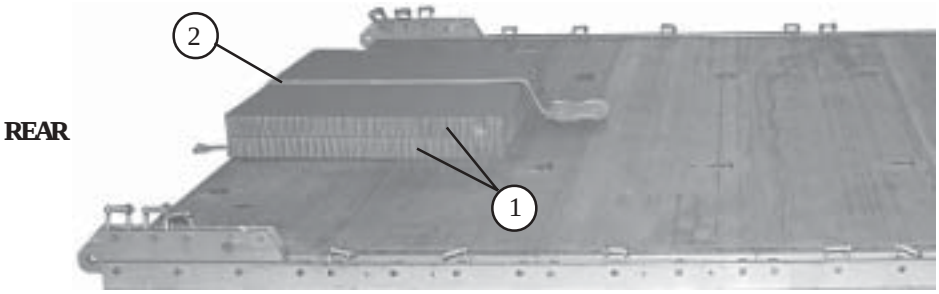
Figure 5. Ammunition Boxes Lashed and Secured on the Front of the Platform (continued)



6 Pass a 15-foot lashing through tie-down ring A1, across the top of the boxes and through tie-down ring B2. Secure the lashing with a D-ring and a load binder.

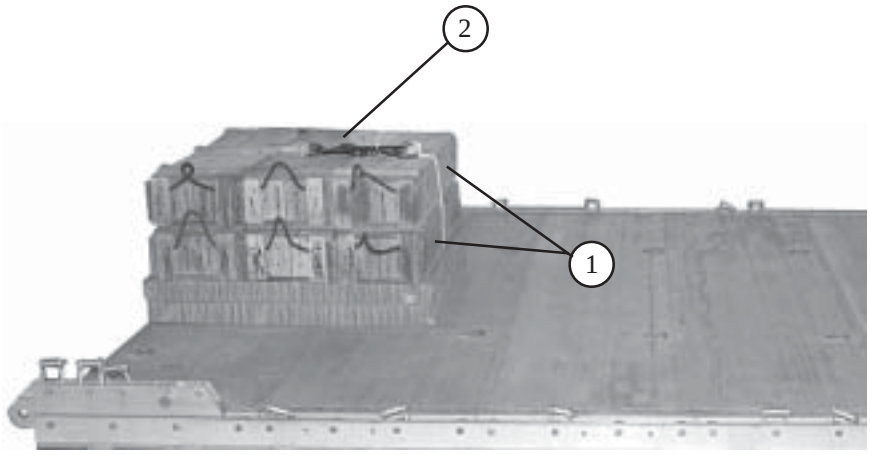
7 Pass another 15-foot lashing through tie-down ring B1, across the top of the boxes, and through tie-down ring A2. Secure the lashing with a D-ring and a load binder.

Figure 5. Ammunition Boxes Lashed and Secured on the Front of the Platform (continued)



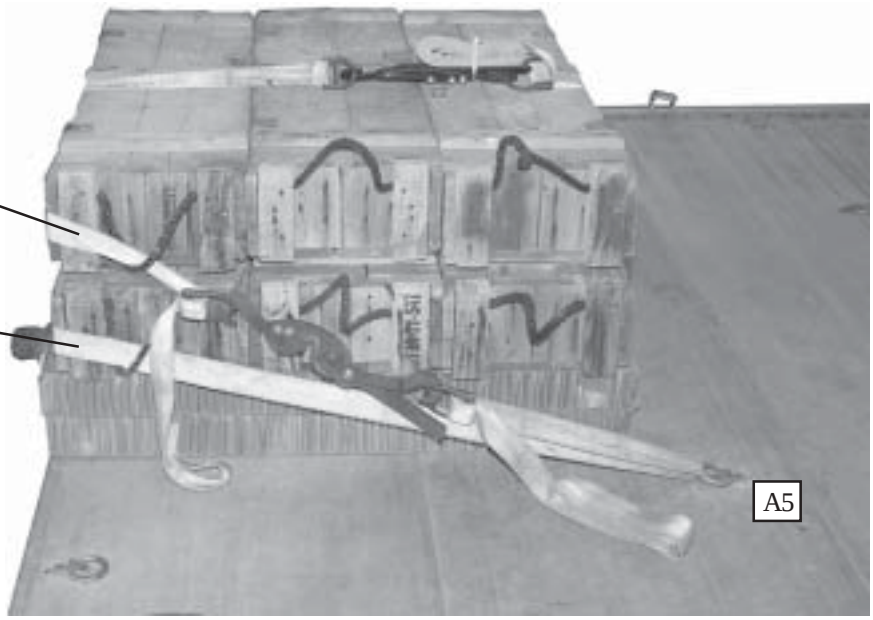
1. Center two 36- by 38-inch pieces of honeycomb on the rear edge of the platform.
2. Center a 15-foot lashing from front to rear across the top piece of honeycomb.

Figure 6. Honeycomb and Lashing Positioned on the Rear of the Platform



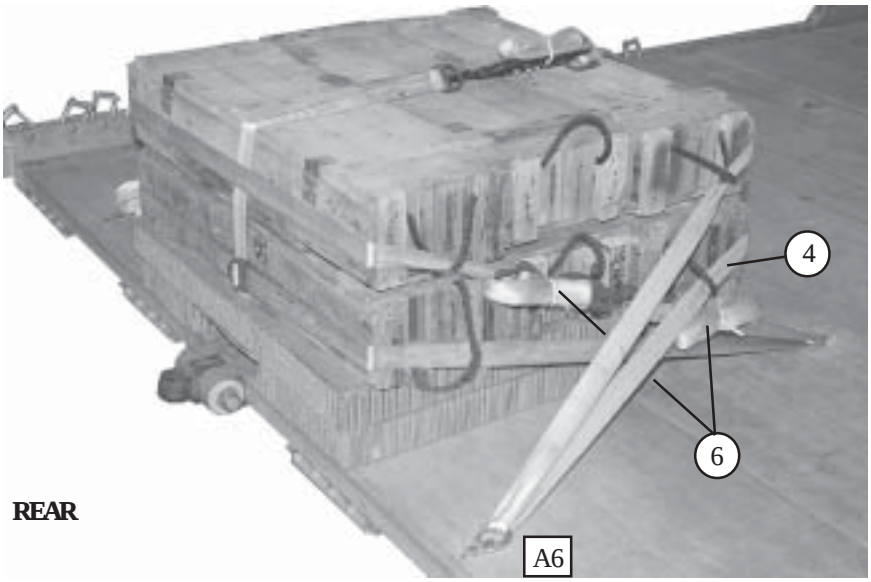
1. Place six ammunition boxes in three stacks of two each on top of the honeycomb.
2. Bind the boxes together using the pre-positioned lashing, a D-ring, and a load binder.

Figure 7. Ammunition Boxes Positioned on the Rear of the Platform



1. Form a 30-foot lashing according to FM 4-20.102/TO 13C7-1-5. Starting on the right rear side, run the lashing across the rear of the bottom row of boxes. Pass the free end of the lashing through the carrying handle of the bottom rear box and through tie-down ring A5.
2. Pass the other free end of the lashing on the left side through the carrying handle of the bottom rear box and through tie-down ring B5. Continue passing the lashing up through the carrying handle of the rear top box on the left side, around the rear of the top rear box and through the carrying handle of the top rear box on the right side.
3. Do not secure lashing at this time.

Figure 8. Ammunition Boxes Lashed and Secured on the Rear of the Platform

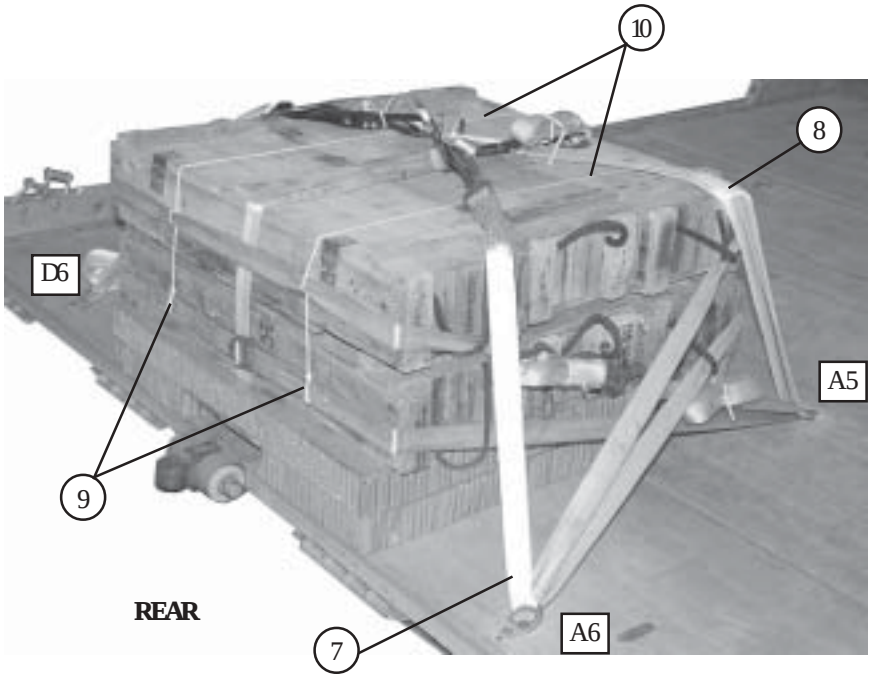


4 Form a 30-foot lashing according to FM 4-20.102/TO 13C7-1-5. Starting on the right front side, run the lashing across the bottom row of boxes. Pass the free end of the lashing through the carrying handle of the bottom front box and through tie-down ring A6. Continue passing the lashing up through the carrying handle of the top front box on the right side, around the front of the top box and through the carrying handle of the top front box on the left side.

5 Pass the other free end of the lashing around the front of the bottom row of boxes and through the carrying handle of the bottom front box on the left side to tie-down ring D6 (not shown).

6 Secure each side load binder simultaneously.

Figure 8. Ammunition Boxes Lashed and Secured on the Rear of the Platform (continued)



7 Pass a 15-foot lashing from tie-down ring A6 across the top of the boxes to tie-down ring B5. Secure the lashing with a D-ring and load binder.

8 Pass another 15-foot lashing from tie-down ring A5 across the top of the boxes to tie-down ring D6. Secure the lashing with a D-ring and load binder.

9 Safety tie the lashings in place using two lengths of type III nlyon cord. Tie three alternating half hitches around the bottom of the lashing. Pass the cord around the top of the lashing and tie another half hitch.

10 Pass the free end of the cord over the top of the boxes and form a half hitch around the top of the lashing on the other side. Secure the lashing to the bottom lashing using three alternating half hitches and an overhand knot on the running end.

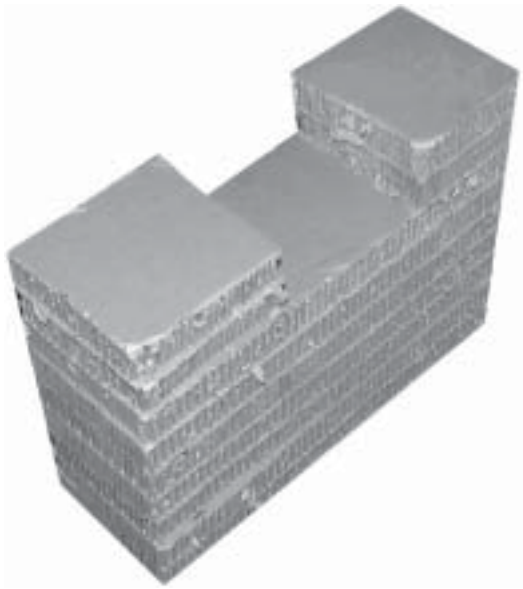
Figure 1-8. Ammunition Boxes Lashed and Secured on the Rear of the Platform (continued)

BUILDING AND PLACING HONEYCOMB STACKS

4. Prepare the honeycomb stacks as shown in Figures 9 through 11. Position the honeycomb stack as shown in Figure 12.

Stack Number	Pieces	Width (inches)	Length (inches)	Material	Instructions
1	12	36	12	Honeycomb	Glue to form base.

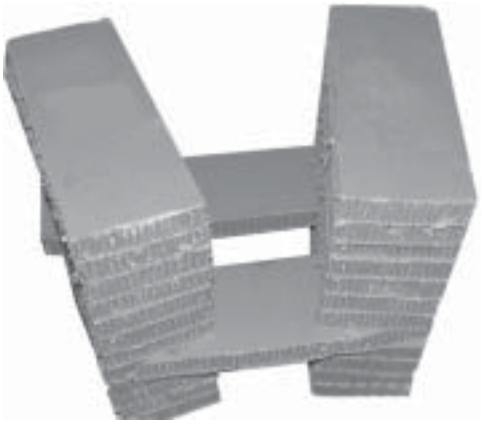
Figure 9. Stack 1 Prepared



Stack Number	Pieces	Width (inches)	Length (inches)	Material	Instructions
2	7	36	12	Honeycomb	Glue to form base.
	4	12	12	Honeycomb	Stack and glue two pieces of honeycomb flush over each side of the base

Figure 10. Stack 2 Prepared

FRONT

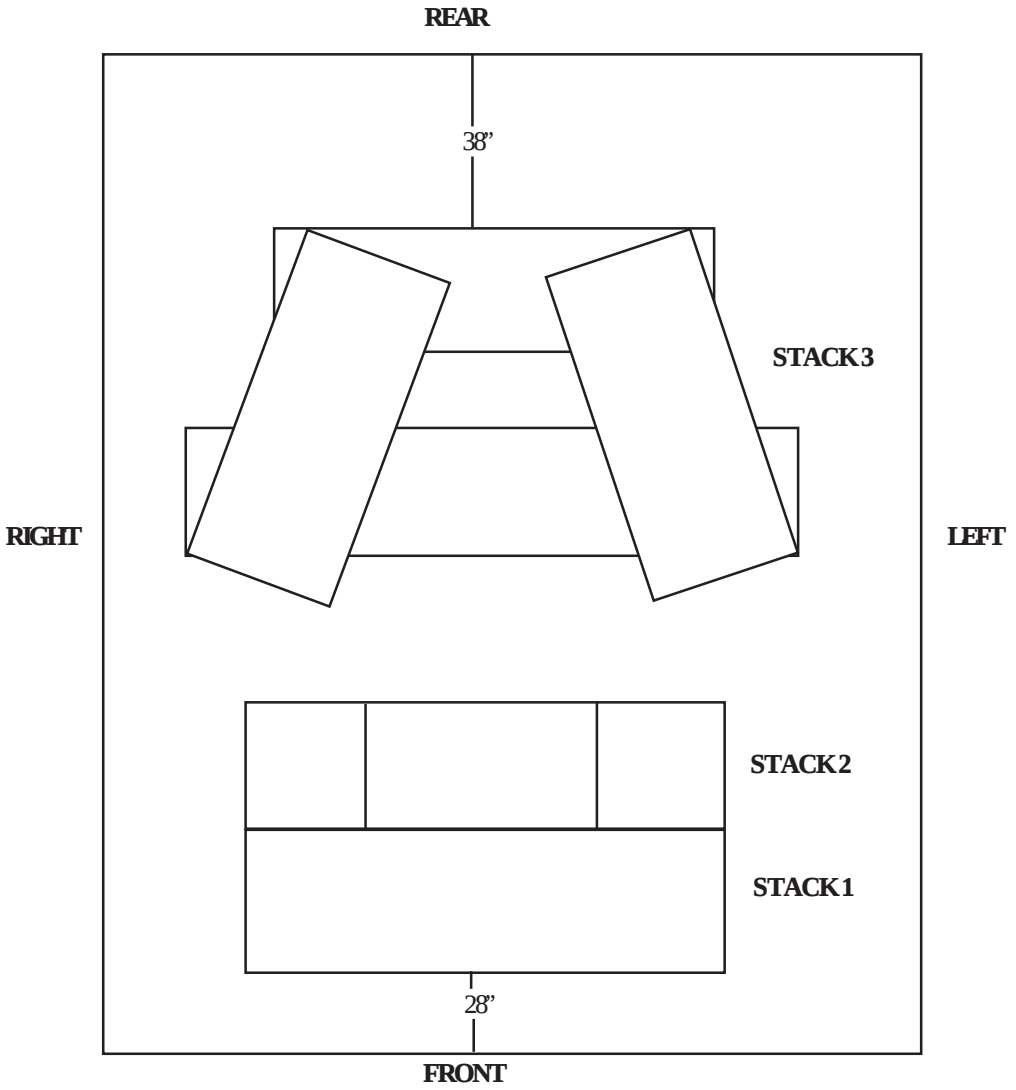


REAR

Stack Number	Pieces	Width (inches)	Length (inches)	Material	Instructions
3	8	12	32	Honeycomb	Form two base stacks of four layers each in a "V" shape. Cut a 10- by 6-inch cutout on the front outside of the bottom two layers. Place the stacks 25 inches apart in the front and 11 inches apart in the rear.
	1	36	12	Honeycomb	Place honeycomb over the rear of the base stacks to form a bridge. Place the honeycomb so that the rear edge of the bridge is aligned with the rear outside corners of the base stacks.
	1	48	12	Honeycomb	Place honeycomb over the front of the base stacks to form a bridge. Place the honeycomb so that the front edge of the bridge is aligned with the front outside corners of the base stacks.
	14	12	32	Honeycomb	Form two stacks of seven layers each. Place each stack on top of the bridge and align it with each base stack.

Figure 11. Stack 3 Prepared

Note: This is not drawn to scale.

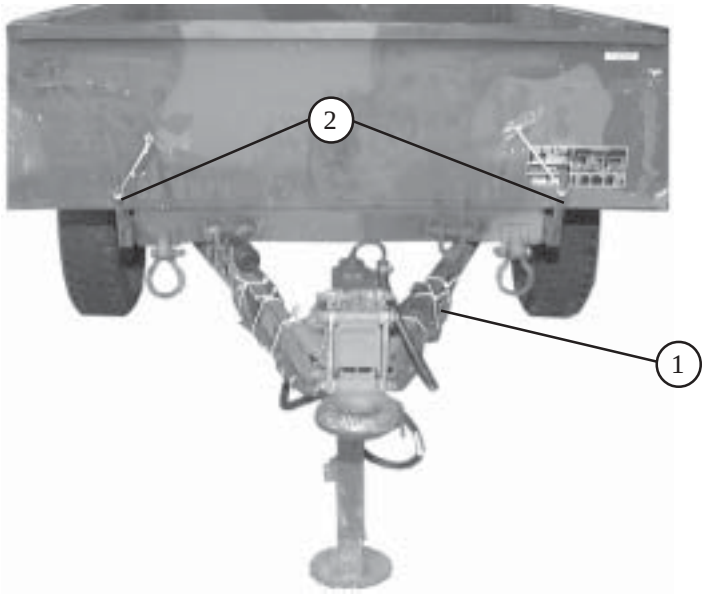


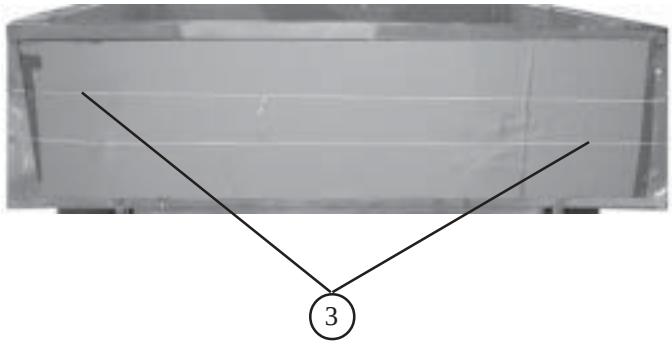
Stack Number	Position of Stacks on Platform
	Place stack:
1	Centered 28 inches from the front edge of platform.
2	Centered flush against the rear of stack 1
3	Centered 38 inches from the rear edge of the platform.

Figure 12. Overhead View of Honeycomb Stacks Positioned on Platform

PREPARING THE TRAILER

5. Prepare the trailer as shown in Figures 13 and 14. Remove the tarpaulin, bows, and side racks according to TM 9-2330-202-14&P.



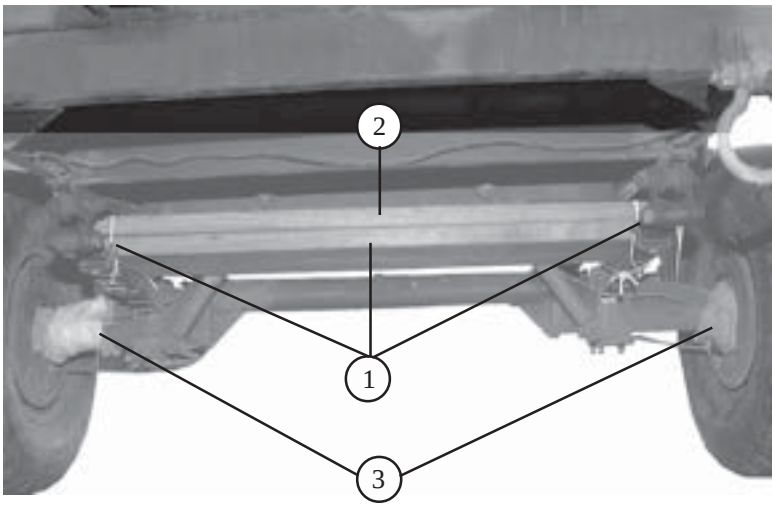


(1) Secure the safety chains and intervehicular cable to the drawbar frame with type III nylon cord or tape.

(2) Secure the hand brake in the OFF position with two lengths of type III nylon cord.

(3) Place a 24- by 60-inch piece of honeycomb on the drawbar frame in front of the hand brake. Secure the honeycomb with a length of type III nylon cord.

Figure 13. Front of Trailer Prepared

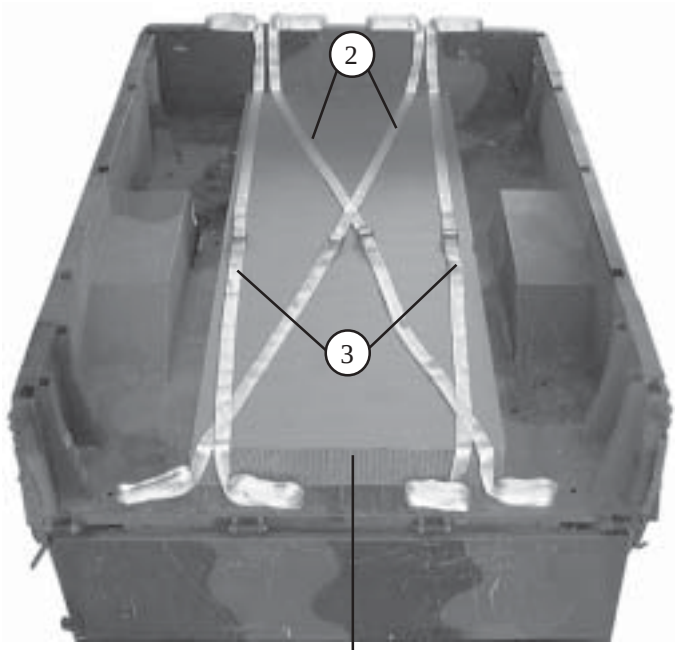


1. Lay a piece of 2- by 7- by 46-inch lumber on top of the leaf springs and the frame.
2. Place a piece of 2- by 12- by 46-inch lumber on top and centered on the 2- by 7- by 46-inch piece of lumber. Secure them with type III nylon cord.
3. Pad axles with cellulose wadding.
4. Tie the rear leg up to the frame with a length of type III nylon cord (not shown).

Figure 14. Rear of Trailer Prepared

STOWING ACCOMPANYING LOAD AND TRAILER COMPONENTS IN TRAILER

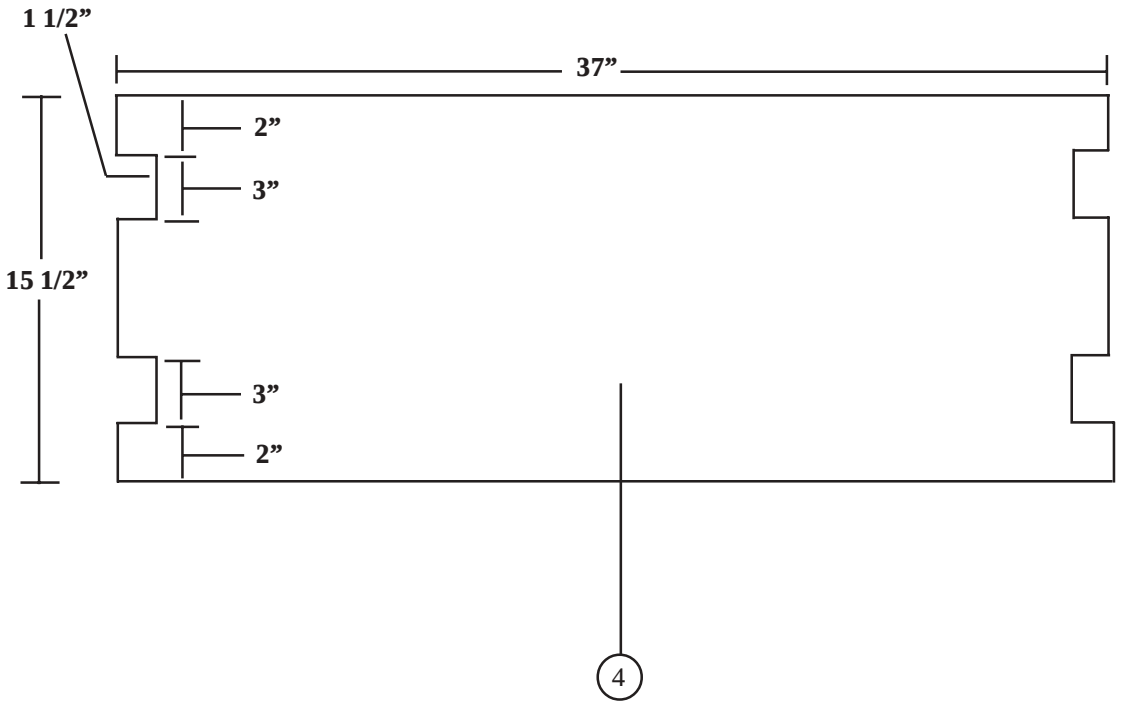
6. Stow the accompanying load of 12 ammunition boxes in the trailer as shown in Figures 15 and 16. Stow the trailer components as shown in Figure 17.



1. Center two 36- by 92-inch pieces of honeycomb in the trailer bed.
2. Form six 30-foot lashings according to FM 4-20.102/TO 13C7-1-5. Place two 30-foot lashings on top of the honeycomb from front to rear crossing at the center.
3. Place two 30-foot lashings on top of the honeycomb from front to rear 22 inches apart.

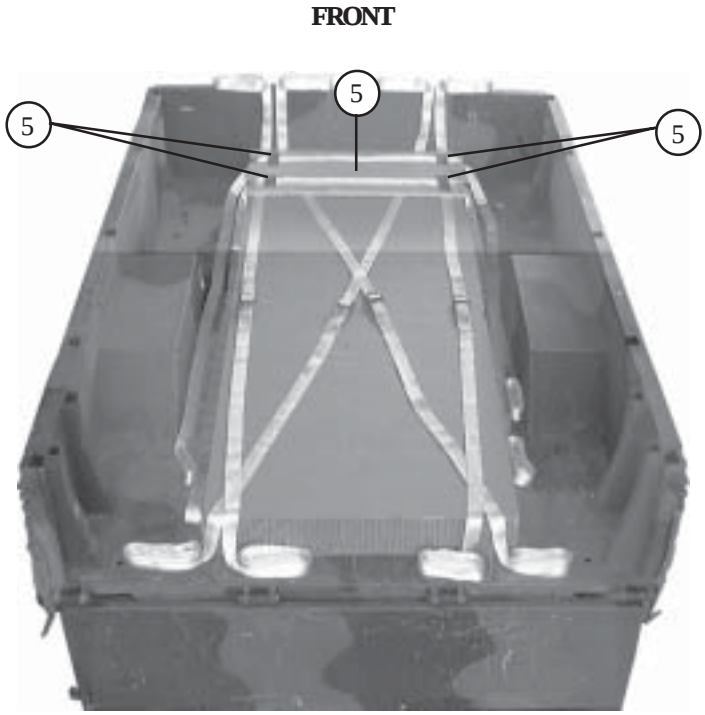
Figure 15. Honeycomb, Lashings, and Endboards Positioned in the Trailer

Note: This drawing is not drawn to scale.



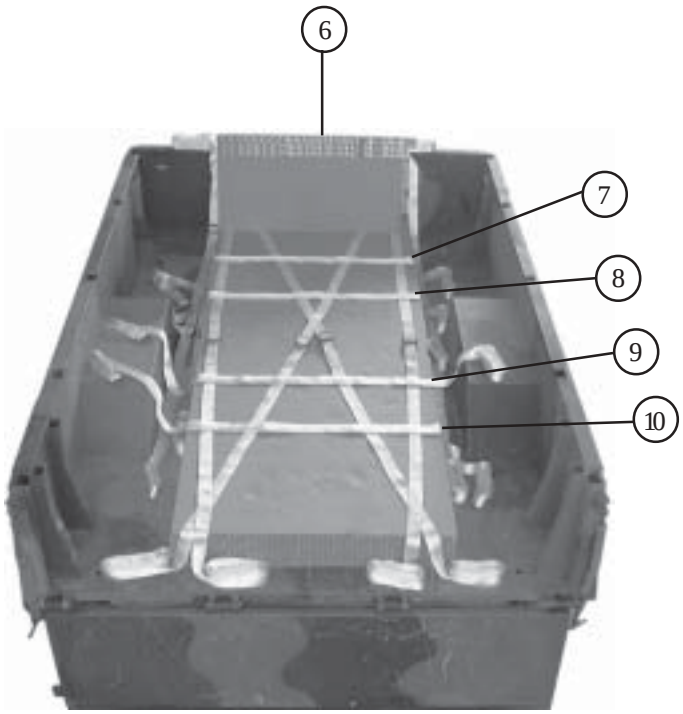
4 Cut two endboards as shown above using 3/4-inch piece of plywood.

Figure 15. Honeycomb, Lashings, and Endboards Positioned in the Trailer (continued)



5 Place endboards in the front of the trailer on top of the honeycomb. Place two 30-foot lashings on the back of the two endboards, and tape the lashings in place.

Figure 15. Honeycomb, Lashings, and Endboards Positioned in the Trailer (continued)



REAR

6 Place the endboards against the front of the trailer bed. Cut and position three 15- by 36-inch pieces of honeycomb against the endboard.

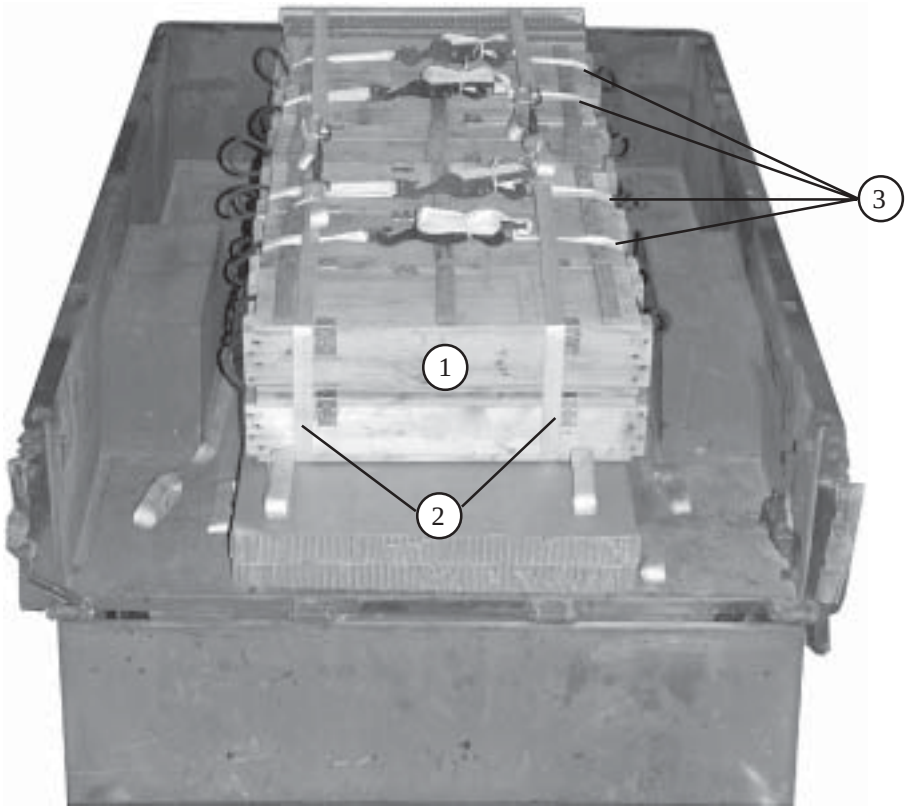
7 Place one 15-foot lashing on the top of the honeycomb from left to right 16 inches from the front of the trailer.

8 Place one 15-foot lashing on the top of the honeycomb from left to right 27 inches from the front of the trailer.

9 Place one 15-foot lashing on the top of the honeycomb from left to right 57 1/2 inches from the front of the trailer.

10 Place one 15-foot lashing on the top of the honeycomb from left to right 70 inches from the front of the trailer.

Figure 15. Honeycomb, Lashings, and Endboards Positioned in the Trailer (continued)

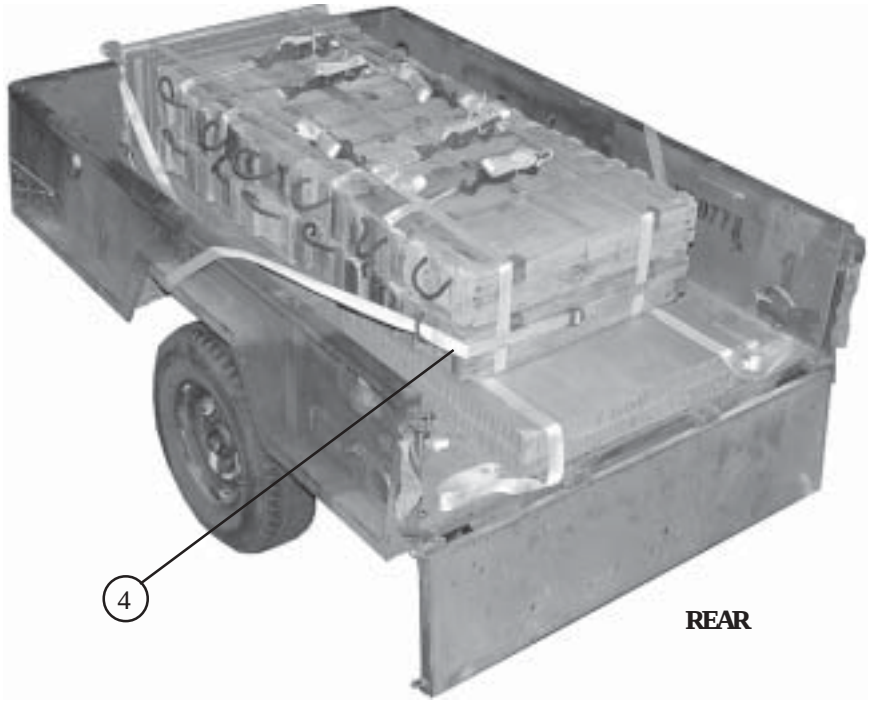


REAR

1. Place 12 ammunition boxes in two layers of six each on top of the honeycomb. Place them flush against the three pieces of honeycomb.
2. Secure the boxes in place with the two pre-positioned lashings running front to rear.
3. Secure the boxes in place with the four pre-positioned lashings running left to right.

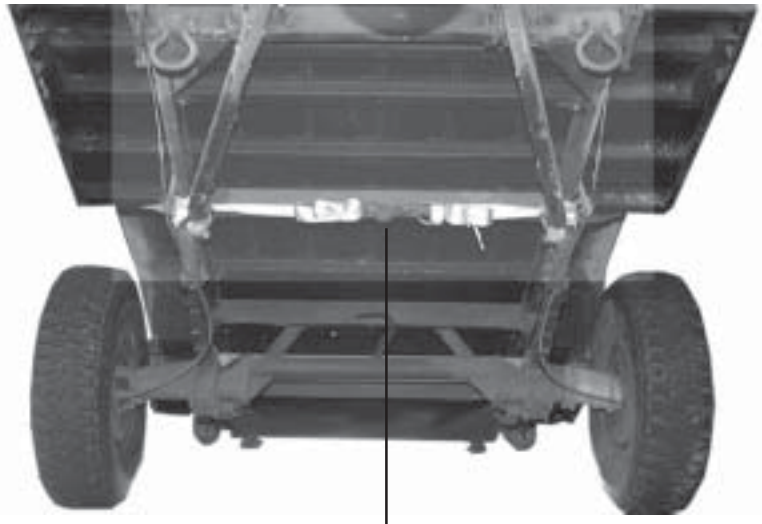
Note: The lashings may need to be adjusted slightly after the ammunition boxes are set in place.

Figure 16. Ammunition Boxes Lashed and Secured in the Trailer



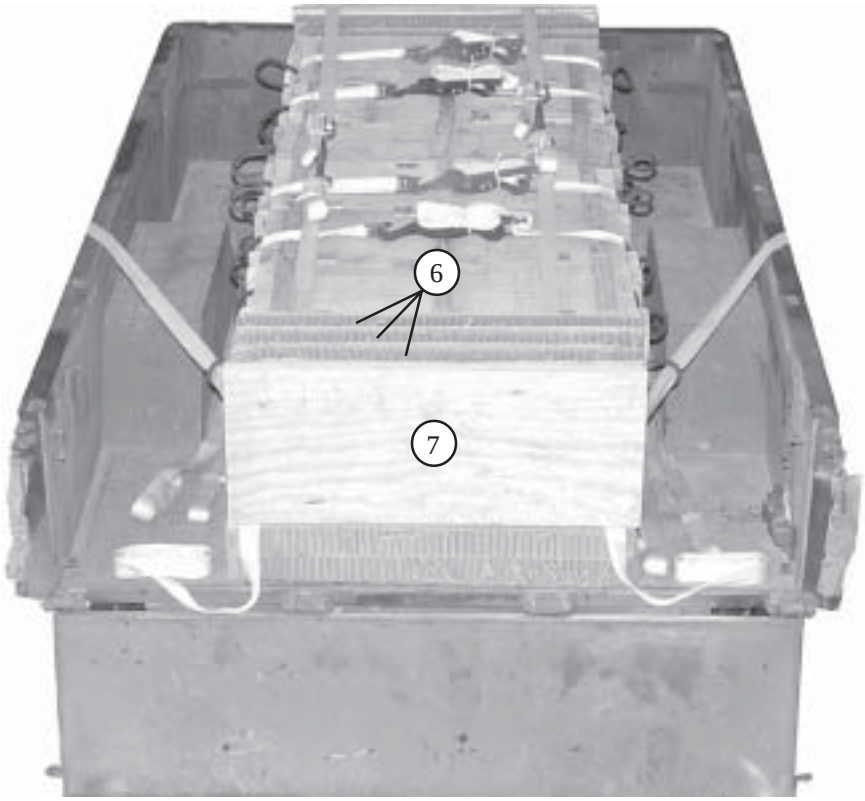
(4) Form a 30-foot lashing according to FM 4-20.102/TO 13C7-1-5. Run the lashing across the rear bottom box. Pass each free end through the carrying handle of the rear bottom box and over the side panel of the trailer, in front of the wheel well.

Figure 16. Ammunition Boxes Lashed and Secured in the Trailer (continued)



5 Secure the lashing in front of the second cross member of the trailer with two D-rings and a load binder.

Figure 16. Ammunition Boxes Lashed and Secured in the Trailer (continued)

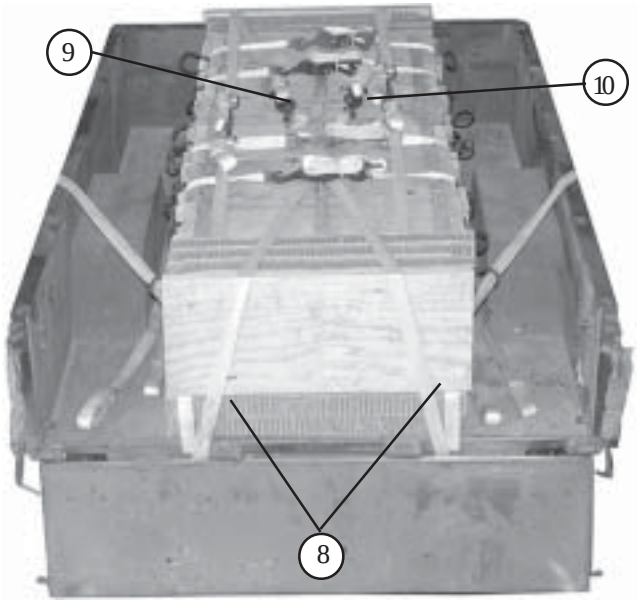


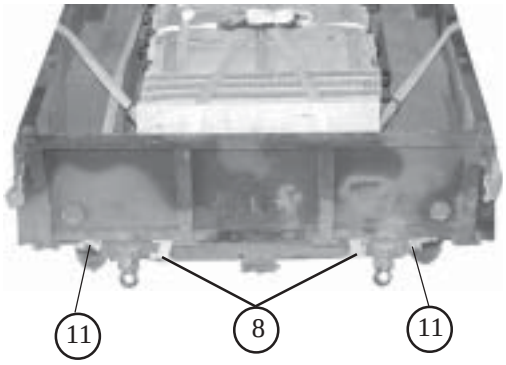
REAR

(6) Place three 15- by 36-inch pieces of honeycomb flush against the rear ammunition boxes.

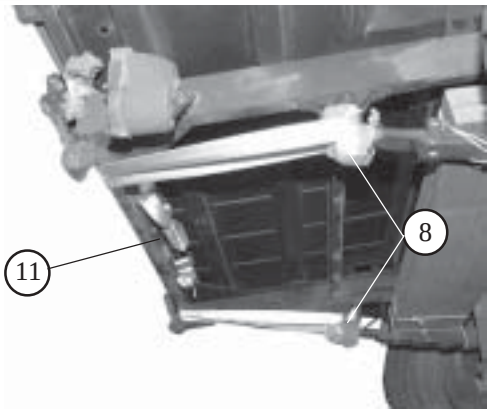
(7) Cut and place two 3/4- by 15- by 36-inch pieces of plywood flush against the honeycomb.

Figure 16. Ammunition Boxes Lashed and Secured in the Trailer (continued)





REAR



(8) Pass the free end of each pre-positioned lashing (on the rear of the trailer) between the tailgate and the cargo bed. Pass the ends around the bumper and back up to the top of the load.

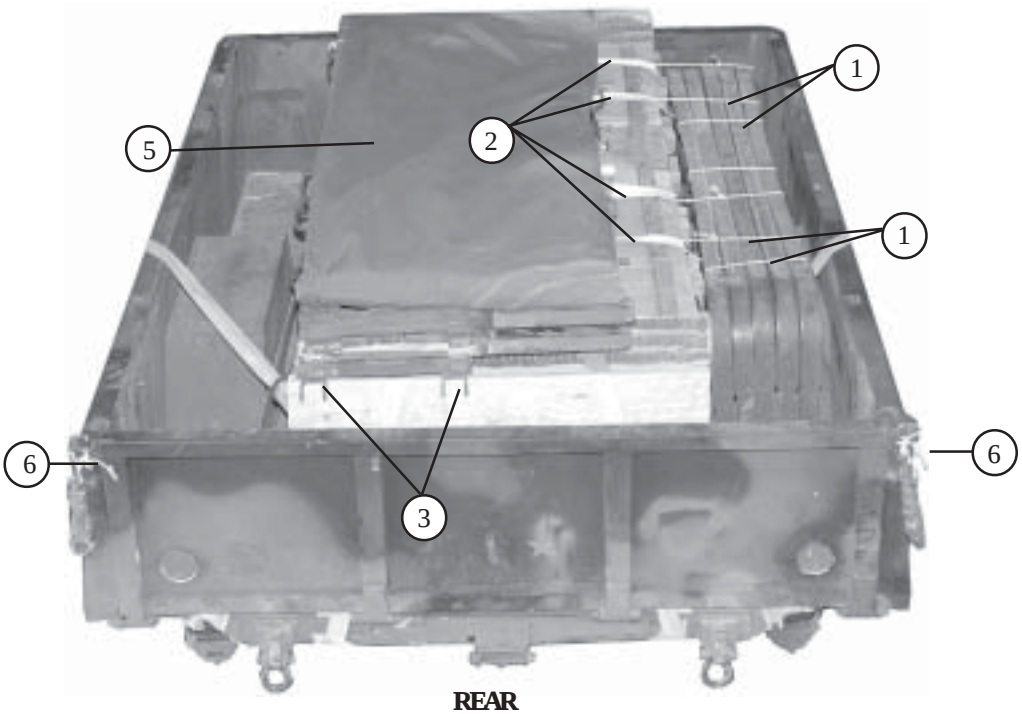
(9) Secure the left rear lashing to the right front lashing with a D-ring and a load binder.

(10) Secure the right rear lashing to the left front lashing with a D-ring and a load binder.

(11) Pass the free end of each pre-positioned 30-foot lashing (attached to the front endboard) between the tailgate and the cargo bed. Run each lashing down between the mainframe and under the cargo bed. Secure the lashings with D-rings and load binders (not shown).

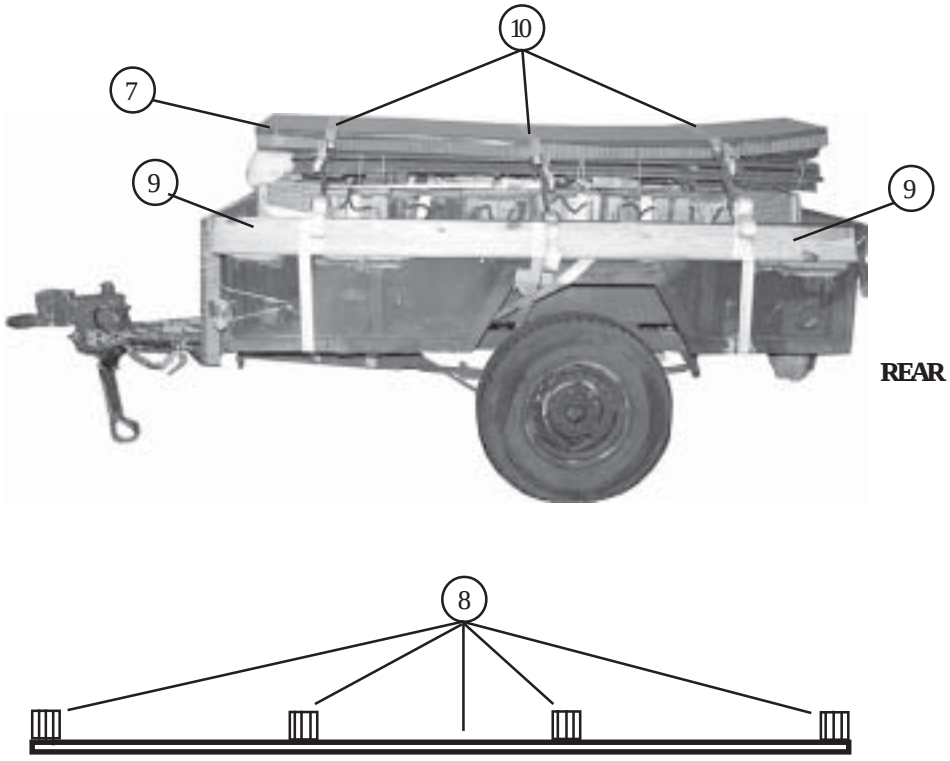
Note: Pad sharp areas that touch lashings to avoid contact.

Figure 16. Ammunition Boxes Lashed and Secured in the Trailer (continued)



1. Tie the bows together with type III nylon cord, and place them inside the trailer on the right side.
2. Tie the bows with type III nylon cord to the lashings which run from left to right across the top of the ammunition boxes.
3. Cover the ends of the side racks with cellulose wadding and tape. Tie the side racks together with type III nylon cord, and place them on top of the ammunition boxes.
4. Tie the side racks with type III nylon cord to the lashings which run from left to right across the top of the ammunition boxes (not shown).
5. Fold the tarpaulin and center it on top of the accompanying load.
6. Close the tailgate, and tie the latches with type III nylon cord.

Figure 17. Trailer Components Stowed



7 Place a 36- by 96-inch piece of honeycomb on top of the tarpaulin. Tape the edges of the honeycomb where the lashings will touch.

8 Cut two 2- by 6- by 96-inch pieces of lumber to serve as side boards. Cut eight 6- by 6-inch pieces of honeycomb. Glue four pieces of the honeycomb to each side board.

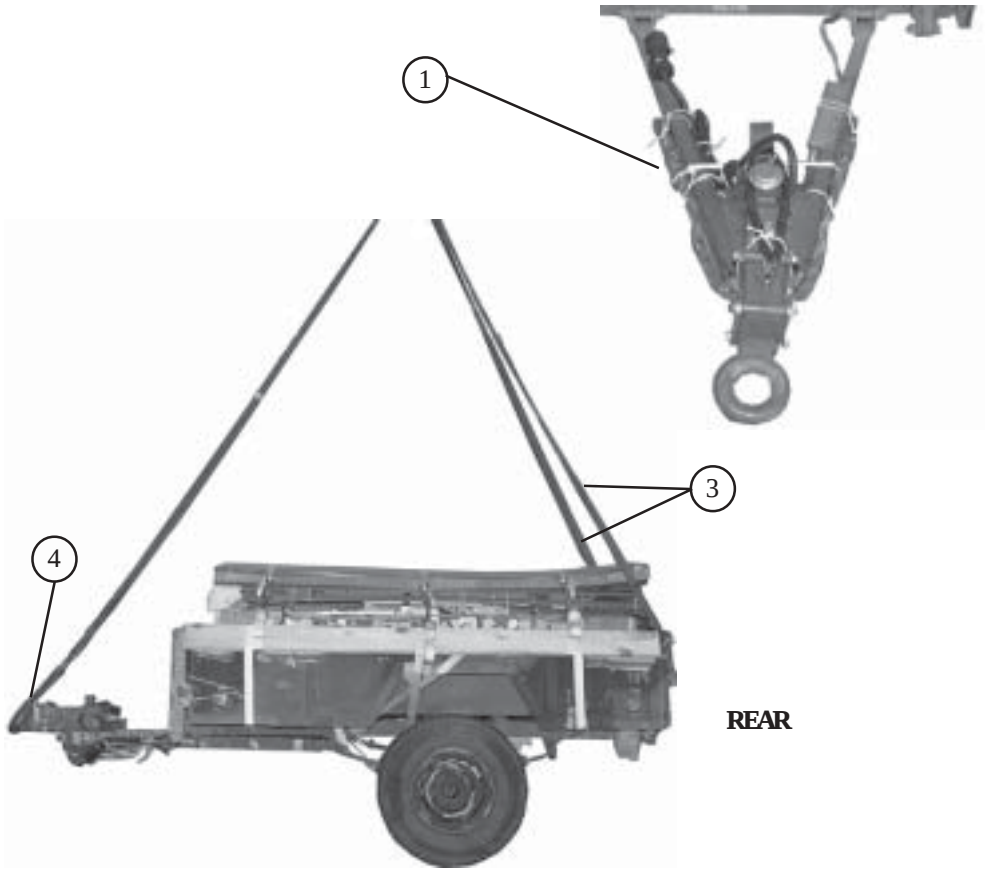
9 Tie the side boards to the trailer with type III nylon cord.

10 Form three 30-foot lashings according to FM 4-20.102/TO 13C7-1-5. Secure the load and trailer components by passing each lashing under the trailer body and looped around the the side boards. Secure the lashing ends together on the left side of the trailer between the honeycomb and side board.

Figure 17. Trailer Components Stowed (Continued)

SECURING TRAILER SUPPORT STAND AND INSTALLING LIFTING SLINGS

7. Raise and secure the trailer support stand as shown in Figure 18. Use three 12-foot (2-loop), type XXVI nylon webbing slings; one 3-foot (2-loop), type XXVI nylon webbing sling; and three medium suspension clevises to lift the trailer.

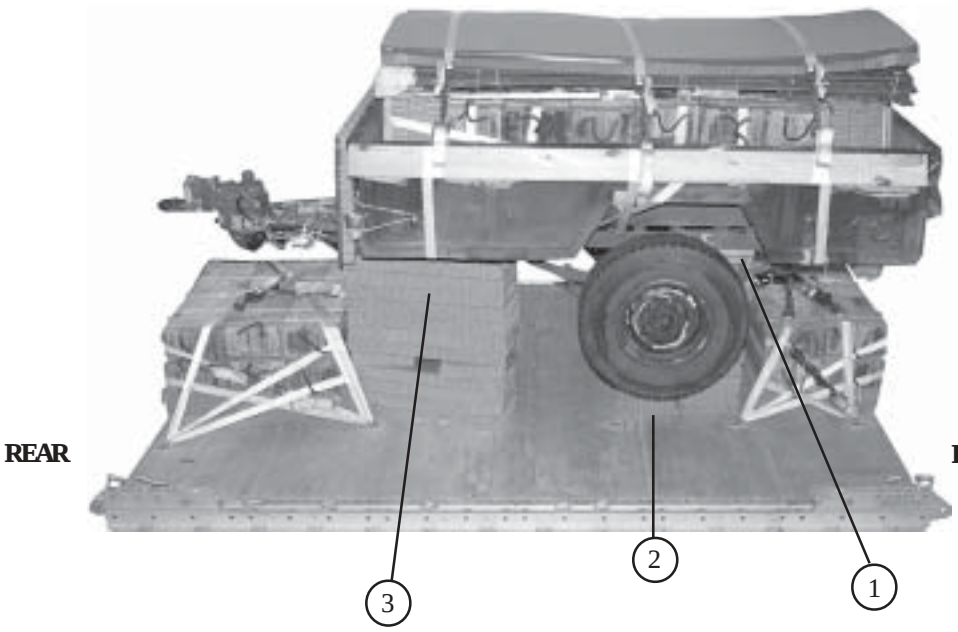


1. Raise the support stand, and tie it with 1/2-inch tubular nylon webbing.
2. Place the bell portion of each clevis in the end loop of each 12-foot sling (not shown).
3. Attach the two rear lifting slings to the tie-down provisions on the rear of the trailer.
4. Pass a 3-foot sling through the lunette on the trailer. Secure both ends of the 3-foot sling to the medium suspension clevis.

Figure 18. Trailer Support Secured and Lifting Slings Installed

POSITIONING TRAILER

8. Position the trailer on the honeycomb stacks according to Figure 19.

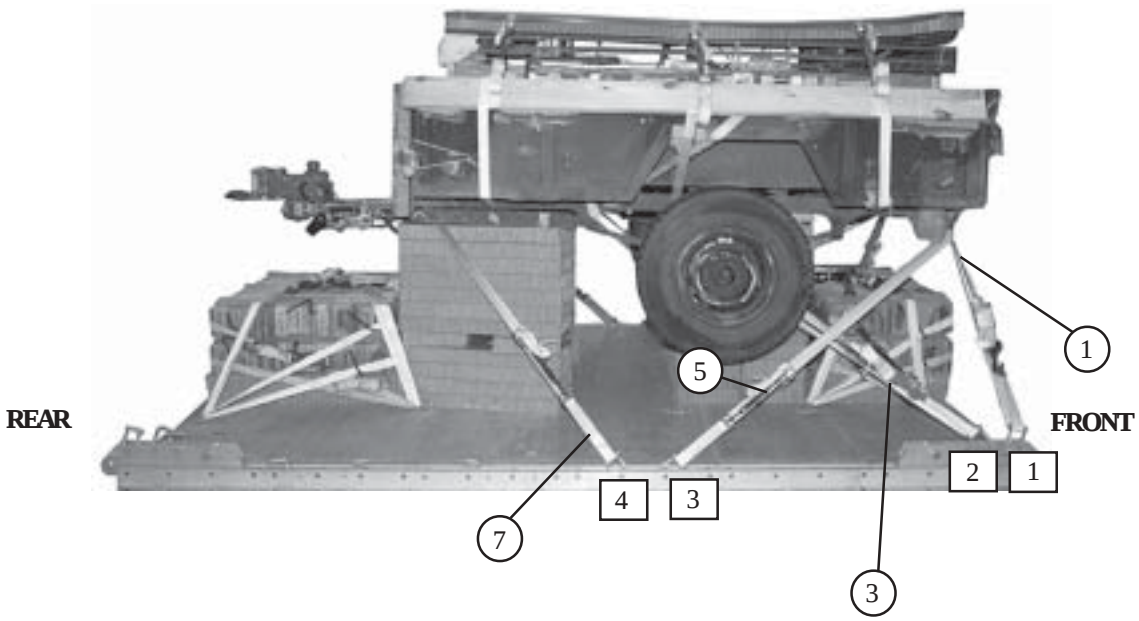


1. Postion the frame support board on stack 1.
2. Position the axle on stack 2.
3. Position the drawbar on stack 3.

Figure 19. Trailer Positioned

LASHING TRAILER

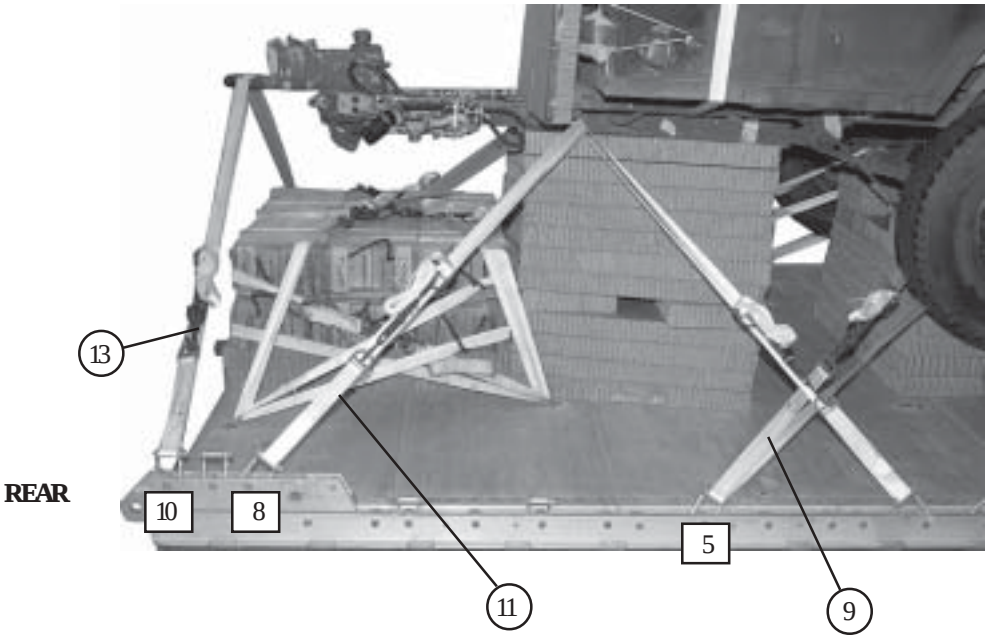
9. Lash the trailer to the platform according to FM 4-20.102/TO 13C7-1-5 and as shown Figures 20 and 21.



Note: Left and right refers to the vehicle not the platform.

Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
1	1	Through the left rear lifting shackle.
2	1A	Through the right rear lifting shackle.
3	2	Around the left side of the axle.
4	2A	Around the right side of the axle.
5	3	Through the left rear lifting shackle.
6	3A	Through the right rear lifting shackle.
7	4	Through the left front lifting shackle.
8	4A	Through the right front lifting shackle.

Figure 20. Lashings 1 Through 8 Installed



Note: Left and right refers to the vehicle not the platform.

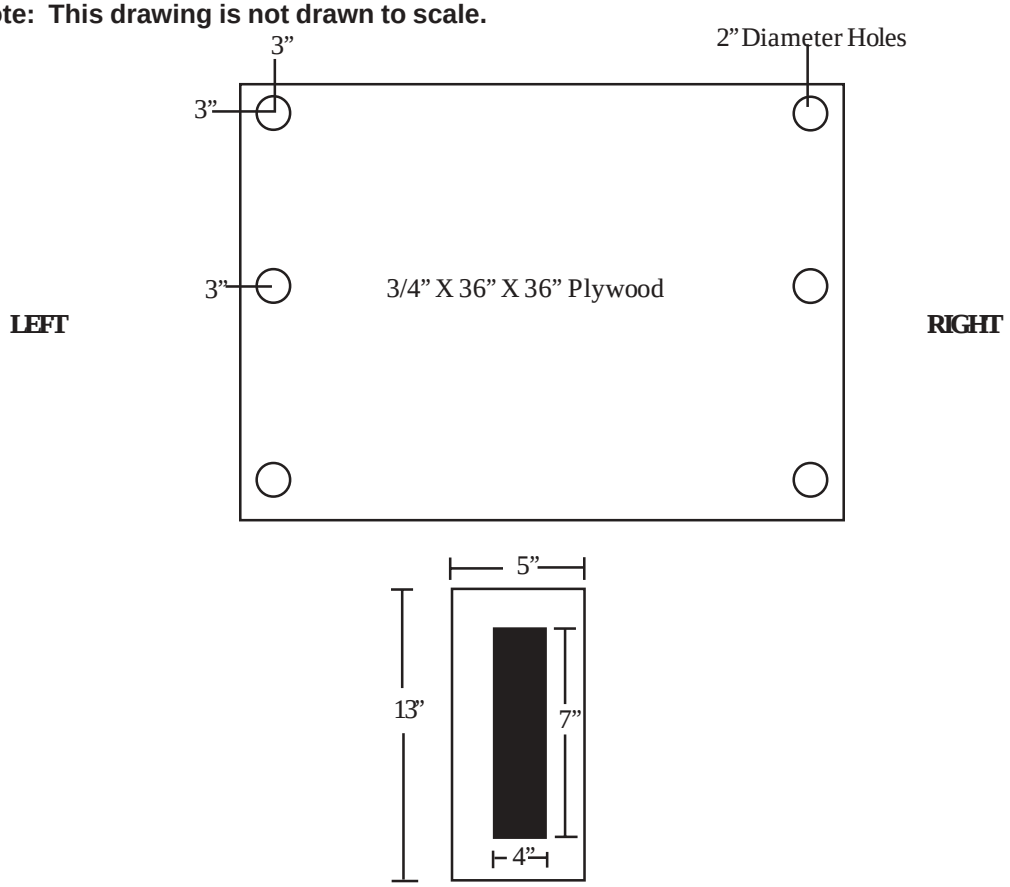
Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
9	5	Around the left side of axle.
10	5A	Around the right side of axle.
11	8	Through the left front lifting shackle.
12	8A	Through the right front lifting shackle
13	10	Through the lunette.
14	10A	Through the lunette.

Figure 21. Lashings 9 Through 14 Installed

BUILDING AND INSTALLING PARACHUTE STOWAGE PLATFORM AND WOODEN SUPPORT

10. Build the parachute stowage platform as shown in Figure 22. Install the parachute stowage platform using four 15-foot tie-down assemblies as shown in Figure 23.

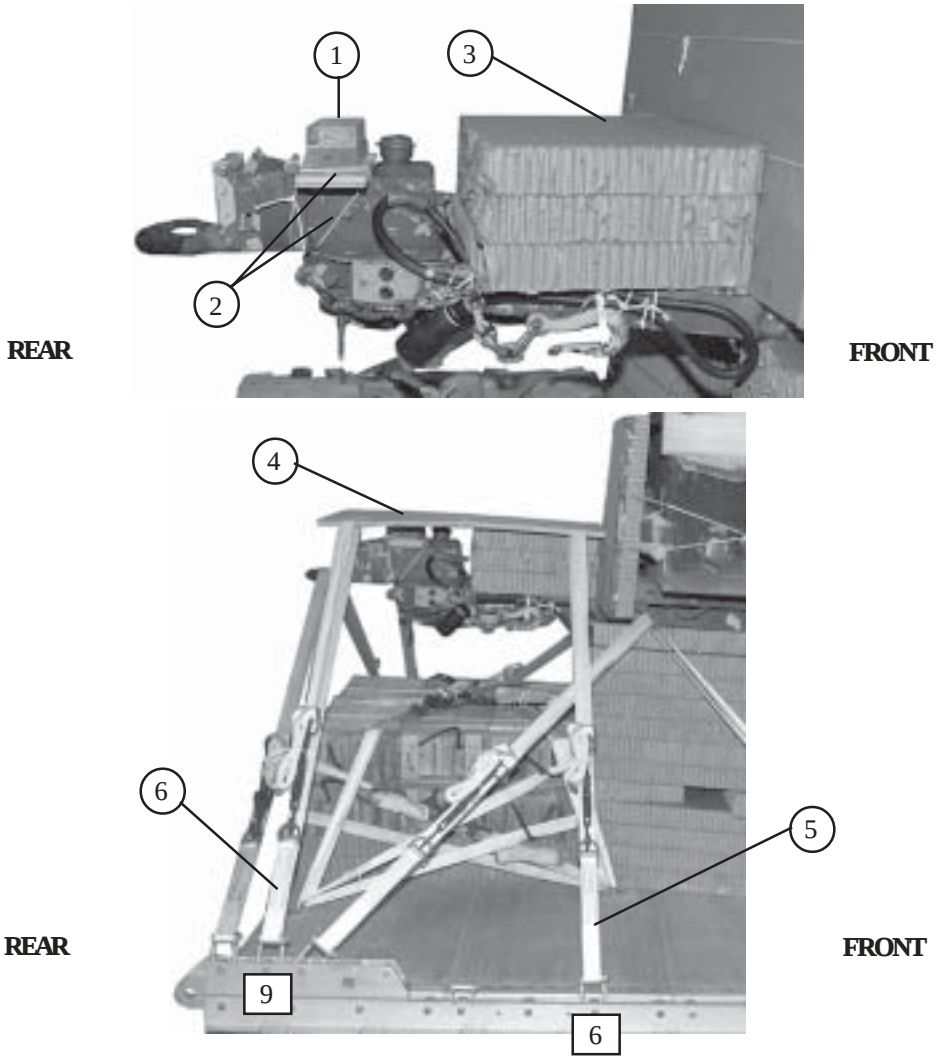
Note: This drawing is not drawn to scale.



Step:

1. Cut a 3/4- by 36- by 36-inch piece of plywood.
2. Drill a 2-inch hole 3 inches from each corner of the platform.
3. Drill a 2-inch hole 3 inches from the side and center of the left and right side of the platform.
4. Cut a 3/4- by 5- by 13-inch piece of plywood.
5. Cut two 2- by 4- by 7-inch pieces of lumber and nail together using 16d nails.
6. Center the two 2- by 4- by 7-inch pieces of lumber on top of the 3/4- by 5- by 13-inch piece of plywood and nail together using 16d nails.

Figure 22. Parachute Stowage Platform and Wooden Support Built

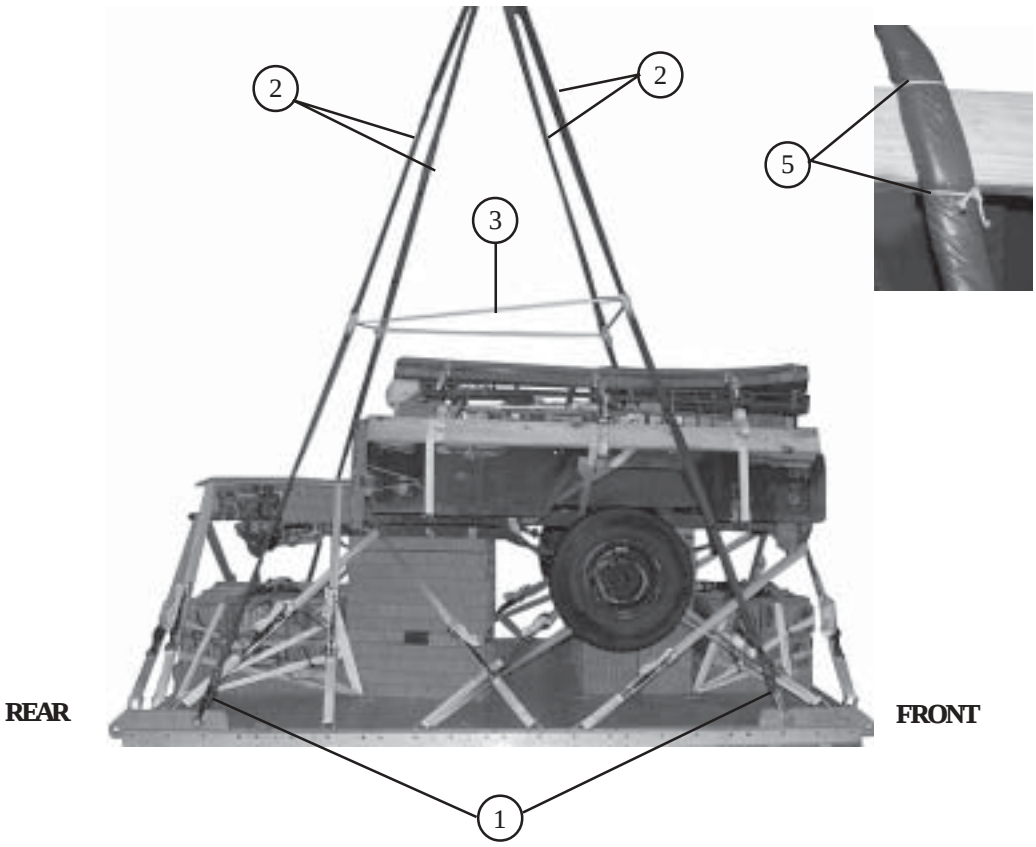


1. Place the wooden support on top of the brake housing.
2. Secure the wooden support down to the brake housing with type III nylon cord.
3. Cut and position three 17- by 22-inch pieces of honeycomb on top of the drawbar flush against the honeycomb on the front of the trailer.
4. Place the parachute stowage platform on top of the honeycomb with the smooth side of plywood facing up.
5. Run the free end of a 15-foot lashing from clevis 6 through the front hole of parachute stowage platform. Secure with D-ring and a load binder. Repeat for clevis 6A.
6. Run the free end of a 15-foot lashing from clevis 9 through the rear hole of parachute stowage platform. Secure with D-ring and a load binder. Repeat for clevis 9A.

Figure 23. Parachute Stowage Platform and Wooden Support Installed

INSTALLING AND SAFETY TIEING SUSPENSION SLINGS

11. Install and safety tie four 16-foot (2-loop), type XXVI nylon webbing slings as shown in Figure 24.

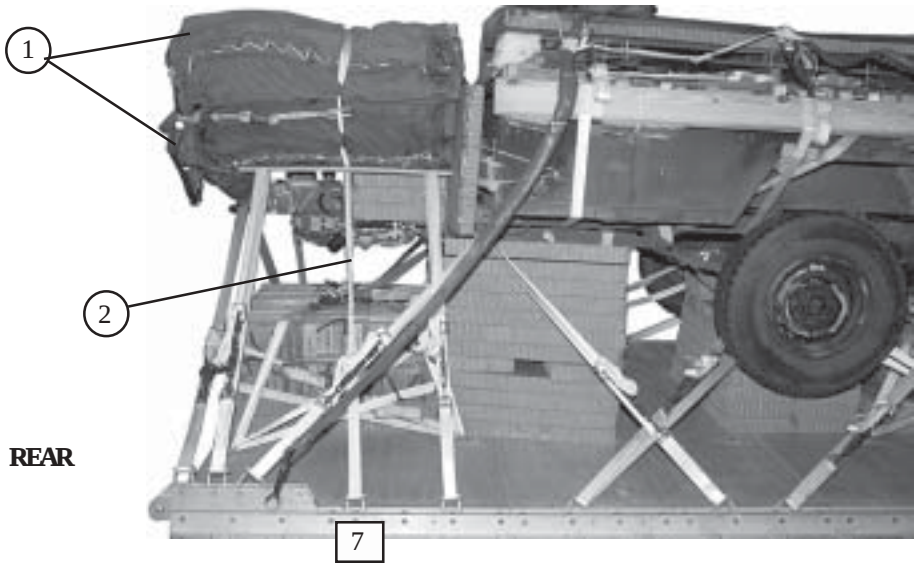


1. Attach a 16-foot (2-loop), type XXVI nylon webbing sling to each tandem link using a large suspension clevis.
2. Raise the suspension slings above the load.
3. Safety the suspension slings with a deadman's tie according to FM 4-20.102/TO 13C7-1-5.
4. Pad the suspension slings with 12 by 36-inch felt and tape. The front will be 34 inches up from the front suspension clevises. The rear will be 42 inches up from the rear suspension clevises (not shown).
5. Lower the suspension slings and secure them to the side boards using type III nylon cord.

Figure 24. Suspension Slings Installed and Safety Tied

STOWING CARGO PARACHUTES

12. Stow and restrain two G-11B cargo parachutes on top of the stowage platform as shown in Figure 25.



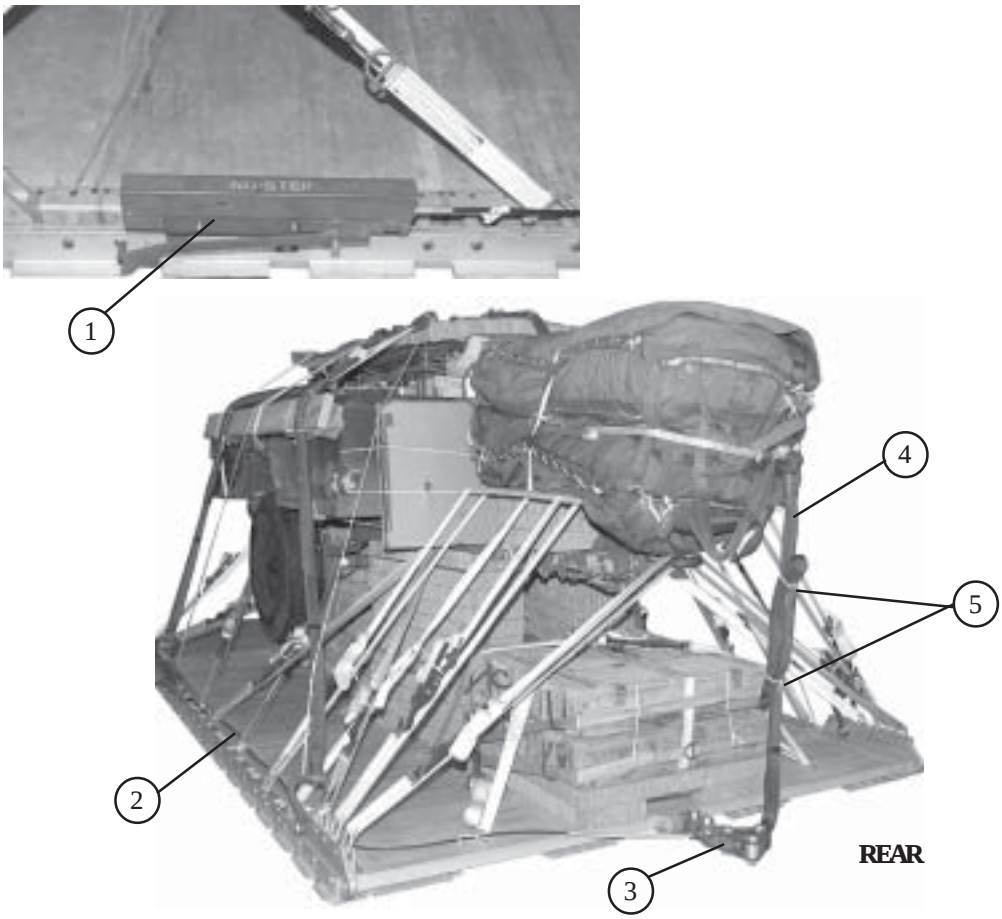
(1) Place two G-11B cargo parachutes on the parachute stowage platform and cluster according to FM 4-20.102/TO 13C7-1-5.

(2) Install a type VIII nylon webbing restraint using clevises 7 and 7A according to FM 4-20.102/TO 13C7-1-5.

Figure 25. Cargo Parachutes Stowed

PREPARING AND INSTALLING EXTRACTION SYSTEM

13. Prepare and install the Extraction Force Transfer Coupling (EFTC) System according to FM 4-20.102/TO 13C7-1-5 and as shown in Figure 26.



1. Install the EFTC mounting brackets to the front mounting holes in the left platform side rail. Install the actuator according to FM 4-20.102/TO 13C7-1-5.

2. Attach a 12-foot cable assembly to the actuator. Safety the cable assembly to tiedown ring D6 and several other convenient points with type I, 1/4-inch cotton webbing.

3. Install the latch assembly to the extraction bracket according to FM 4-20.102/TO 13C7-1-5.

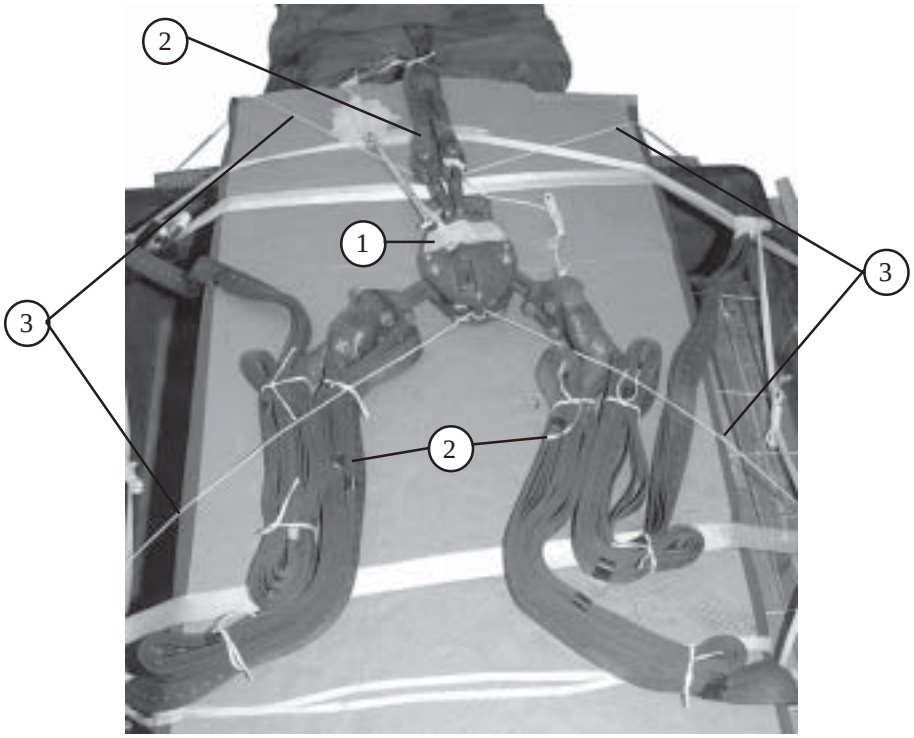
4. Attach a 9-foot (2-loop), type XXVI nylon deployment line.

5. Fold the excess deployment line. Secure the folds using type I, 1/4-inch cotton webbing.

Figure 26. Extraction System Installed

INSTALLING PARACHUTE RELEASE SYSTEM

14. Prepare, install and safety an M-1 cargo parachute release system according to FM 4-20.102/TO 13C7-1-5 and as shown in Figure 27.



1. Place the release on top of the accompanying load.
2. Attach the riser extensions and suspension slings to the release according to FM 4-20.102/TO 13C7-1-5.
3. Secure the release with type III nylon cord to convenient points on the load or platform.

Figure 27. Parachute Release System Installed

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

15. Install the provisions for emergency restraints on the load according to FM 4-20.102/TO 13C7-1-5.

PLACING EXTRACTION PARACHUTE

16. Select the extraction parachute and extraction line needed using the extraction line requirements table in FM 4-20.102/TO 13C7-1-5. Rig the extraction line in an extraction line bag according to TM 10-1670-286-20/TO 13C5-2-41. Place the extraction parachute and extraction line on the load for installation in the aircraft.

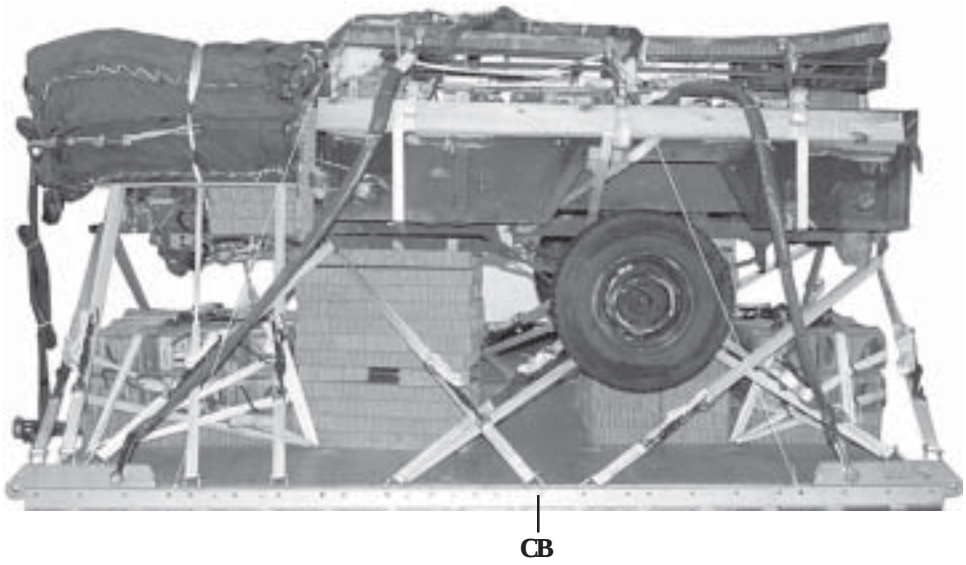
MARKING RIGGED LOAD

17. Mark the rigged load according to FM 4-20.102/TO 13C7-1-5 and as shown in Figure 28. A Shipper's Declaration for Dangerous Goods is required.

EQUIPMENT REQUIRED

18. The equipment required to rig this load is listed in Table 1-1.

CAUTION
Make the final rigger inspection required by FM 4-20.102/ TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD

Weight:	Load shown	5,920 pounds
	Maximum weight	8,000 pounds
Height		72 inches
Width		108 inches
Length		163 inches
Overhang:	Front	0 inches
	Rear (EFTC)	19 inches
CB (from front edge of platform)		70 inches

Figure 28. M101A2, 3/4-ton Trailer and Accompanying Ammunition Load Rigged on a Type V Platform for Low-Velocity Airdrop

Table 1-1. Equipment Required for Rigging the M101, M101A1 or M101A2, 3/4-ton Cargo Trailer with Accompanying Load on a Type V Platform for Low-Velocity Airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive paste, 1-gal	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
4030-00-090-5354	Clevis, large	5
4030-00-678-8562	Clevis, medium	4
	Link assembly:	
	Two-point, 3 3/4-in (1 for DES)	2
5306-00-435-8994	Bolt, 1-in diam, 4-in long (2 added for DES)	4
5310-00-232-5165	Nut, 1-in, hexagonal (2 added for DES)	4
1670-00-003-1953	Plate, side, 3 3/4-in (2 added for DES)	4
5365-00-007-3414	Spacer, large (2 added for DES)	4
	Lumber:	
5510-00-220-6146	2- by 4-in	As required
5510-00-220-6148	2- by 6-in	As required
5510-00-220-6250	2- by 12-in	As required
5530-00-618-8073	Plywood, 3/4-in	2 sheets
1670-00-753-3928	Pad, energy dissipating, honeycomb, 3- by 36- by 96-in	20 sheets
	Parachute:	
	Cargo:	
1670-01-016-7841	G-11B	2
	Cargo extraction:	
1670-01-063-3715	15-foot	1
	Platform, airdrop type V,12-foot:	
1670-01-162-2370	Rail	2
1670-01-162-2372	Clevis assembly	20
1670-01-353-8425	Bracket assembly, coupling	1
1670-01-353-8424	Extraction bracket assembly	1
1670-01-162-2381	Tandem link assembly (Multipurpose)	4
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 1-1. Equipment Required for Rigging the M101, M101A1 or M101A2, 3/4-ton Cargo Trailer with Accompanying Load on a Type V Platform for Low-Velocity Airdrop (continued)

National Stock Number	Item	Quantity
	Sling, cargo airdrop	
	For suspension:	
1670-01-063-7761	16-ft (2-loop), type XXVI nylon webbing	4
	For deployment:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	1
	For riser extension:	
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
	For lifting:	
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	1
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	3
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
1670-00-003-4391	Knife, miniature, cutter (for DES)	1
1670-01-183-2678	Leaf, extraction line (line bag)(add 2 for DES)	2
	Line, drogue (for DES)	
1670-01-064-4452	60-ft (1-loop), type XXVI	1
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI	1
1670-01-107-7652	160-ft (1-loop), type XXVI	1
1670-01-483-8259	Link, tow release mechanism (H-Block) C-17 aircraft	1
1670-00-040-8219	Strap, parachute release, multicut	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	55
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in	As required
8305-00-263-3591	Type VIII	As required
5315-00-753-3885	Nail 16d	As required

Glossary

AFB	Air Force Base
AFMAN	Air Force Joint Manual
AFTO	Air Force Technical Order
AFSOC	Air Force Special Operations Command
ALC	Airlift Logistics Center
AMC	Air Mobility Command
CB	center of balance
DA	Department of Army
DC	District of Columbia
DES	Drogue Extraction System
diam	diameter
EFTC	extraction force transfer coupling
FM	field manual
ft	foot/feet
HQ	headquarters
in	inch
lb	pound
No	number

TRADOC	US Army Training and Doctrine Command
USA	United States of America
TM	technical manual
TO	technical order

References

AFR 55-40/AR 59-4	Joint Airdrop Inspection Records, Malfunction Investigations and Activity Reporting. 1 May 1998.
***AFMAN(I) 24-204/ TM 38-250**	Preparing Hazardous Materials for Military Air Shipments. December 2001.
****FM 4-20.102/NAVSEA SS400-AB-MMO-010/ TO 13C7-1-5**	Airdop of Supplies and Equipment: Rigging Airdrop Platforms. 22 August 2001.
TM 9-2330-202-14 & P	Operator's Organizational, Direct Support, and General Support Maintenance Manual (Including Repair Parts and Special Tools Lists) for Trailer, Cargo: 3/4-Ton, 2-Wheel M101, and M101A1; Chassis, Trailer: 3/4-Ton, 2-Wheel M116 and M116A1
TM 10-1670-268-20&P/ TO 13C7-52-22	Organizational Maintenance Manual with Repair Parts and Special Tools List: Type V Airdrop Platform. 1 June 1986.
TM 10-1670-278-23&P/ TO 13C5-26-2/NAVAIR 13-1-27	Unit and Intermediate Direct Support (DS) Maintenance Manual (Including Repair Parts and Special Tools List) for Parachute, Cargo Type: 15-ft Diam, Cargo Extraction Parachute. 6 November 1989.
TM 10-1670-280-23&P/TO 13C5-31-2/NAVAIR 13-1-31	Unit and Intermediate Direct Support (DS) Maintenance Manual (Including Repair Parts and Special Tools List) for Parachute, Cargo Type: 100-ft Diam, Model G-11A, Model G-11B, and Model G-11C. 5 August 1991.
TM 10-1670-286-20/ TO 13C5-2-41	Unit Maintenance Manual for Sling/Extraction Line Panel (Including Stowing Procedures). 15 March 2001.
TM 10-1670-296-20&P/ TO 13C7-49-2	Unit Maintenance Manual Including Repair Parts and Special Tools List for Ancillary Equipment for Low-Velocity Airdrop Systems (LVADS). 15 September 1995.
FM 10-500-53 TO 13C7-18-41	Airdrop of Supplies and Equipment: Rigging Ammunition. 24 July 2000

***AFMAN(I) 24-204/TM 38-250 has superseded AFJMAN 24-204/TM 38-250 (25 November 1994).**
**** FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 has superseded FM 10-500-2/TO 13C7-1-5 (1 November 1990).**

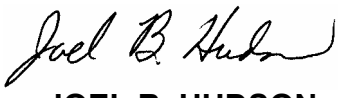
AFTO Form 22	Technical Order Publication Improvement Report
DA Form 2028	Recommended Changes to Publication and Blank Forms. February 1974.
***Shipper's Declaration for Dangerous Goods**	Locally Procured Form.

***Shipper's Declaration for Dangerous Goods has superseded DD Form 1387-2 (February 1982).**

By Order of the Secretary of the Army and the Air Force:

JOHN M. KEANE
General, United States Army
Acting Chief of Staff

Official:



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